# 2007-2008 COLLEGE CATALOG 

Forty-First Edition

# LUZERNE <br> County Community College 

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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 2007. 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, 2007

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.

# LUZERNE COUNTY BOARD OF COMMISSIONERS 

sponsor of

## LUZERNE COUNTY COMMUNITY COLLEGE

## GREGORY SKREPENAK, Chair

ROSE TUCKER
STEPHEN A. URBAN
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.

## COLLEGE ORGANIZATION <br> BOARD OF TRUSTEES



## 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

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

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

## Goal \#3 Offer lifelong learning opportunities to 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

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

## 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

1. 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, 61 Broadway, New York City, NY, 10006, (215) 363-5555. The National League for Nursing Accrediting Com-
mission 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, 35 East Wacker Drive, Suite 1970, Chicago, IL , 60601-2208, (312) 553-9355. This is a specialized accrediting agency.

The Respiratory Therapy Program is accredited by the Commission on Accreditation of Allied Health Education Programs, 35 East Wacker Drive, Suite 1970, Chicago, IL , 60601, (312) 553-9355. 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 171080090, (717) 787-8740.

The Child Development Program received the National Early Childhood Associate Degree Approval from the National Association for the Education of Young Children in 2002. It is one of two programs in the country to be approved to date.

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

1. 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, Vice President/Student Development, 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 Vice President/Student Development. 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 in-
volvement 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 2006, the College had graduated more than 20,000 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.


 Schulman Gallery Baseball Field
Tennis Courts Sports Complex

Horticulture Dept. Greenhouse
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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

In January 2003, Luzerne County Community College opened a branch extension in the newly renovated Eagles Building located on Market Street in downtown Berwick. This was made possible by a partnership with the Berwick Industrial Development Association. The Berwick Center offers day and evening classes leading to a certificate, diploma, or associate degree to students who wish to improve their job skills, prepare for a new career, or transfer to a four-year institution.

The Berwick Center is a complete educational facility equipped with six classrooms, two networked computer labs, a multipurpose room, and a conference room. Unique to the Berwick site is a three-phase electrical lab for high-end training. 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 the Corporate Learning Center on Public Square in downtown Wilkes-Barre in the Spring of 1999.

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
College Misericordia Expressway Program and 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
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, College Misericordia, 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, 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 (Building \#10) is a fully-equipped conference complex catering to the College's need for expanded classroom space, especially in the areas of Continuing Education, non-credit courses and community seminar and workshop offerings.

The Center is comprised of six seminar rooms of varying sizes, two auditoriums and a spacious dining area to provide for all day or meal-centered activities.

## LIBRARY

The Library's mission is to support the objectives of the College by providing resources and services to meet the information needs of faculty, students, staff, alumni and the residents of Luzerne County. The Library combines a traditional library collection and new technologies into a comprehensive program of information services.

All Library collections are on open shelves to which students have direct access. The collections include more than 61,000 volumes, 222 current periodical subscriptions, over 3,300 media items, and over 11,500 items on microforms. The Library has several online database subscriptions, including, but not limited to, EBSCOHost,

Encyclopedia Britannica, CQ Researcher, Lexi-Comp, Lexis-Nexis, Literature Online References, Health Reference, Oxford English Dictionary, Proquest, and Wilsonweb, etc. Eight Internet workstations are available for patrons to search Web-based databases. A photocopier and three Microform Reader-Printers are available for patrons. Specialized bibliographies are published on request.

Also available is inter-library loan service for materials not in the collection. The Library is affiliated with the Online Computer Library Center (OCLC) to provide patrons access to college and research libraries throughout the United States. Students and faculty may also borrow books directly from a number of local and regional libraries. This cooperative arrangement is made available through the Northeastern Pennsylvania Library Network.

The Library facilities include a book stack and seating area, a reference collection area, a periodical/newspaper area, an information/circulation/reserve book desk with reference service, a browsing area featuring new book acquisitions, McNaughton/Best Sellers, and book-on-cassettes collection. All materials located at the LCCC Library can be accessed via the SirsiDynix online catalog, which patrons can also use to view their personal library records. The SirsiDynix online cata$\log$ can also be accessed through the library home page for off-campus use. Two group study rooms are available for students. One Biblographical Instruction Room with 16 computer workstations - The Library Training Center - is used for Library, College, and public training needs. A Viewing Room is available for students to utilize audio/visual materials.

DVD players, VHS videocassette players and monitors, and audio tape recorders are available for instructional purposes in the Media Service Department. A/V 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 nonprint media and A/V equipment. In the event of an emergency, the Media Technologist can be reached at 830-7862.

Media Services Department offices and an audio visual 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 Director of the Library. 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 students, faculty, and staff via TV receivers in all buildings on campus. Such information must be approved in advance by the Director of College Relations.

Handicapped patrons may enter the Library by the ramped entrances. Restroom facilities and access to the main area of the Library are easily available. Open access is provided to all library areas and signs are used throughout the Library to designate facilities and resources.

Brailled texts, recorded and taped books, and periodicals, as well as large-type books, are available for the visually and physically disabled and for persons with reading disabilities. These services are offered through the Regional Library for the Blind and Physically Handicapped in Philadelphia. Equipment needed to play such records and tapes is also available through the Regional Library. Additional materials may be available through inter-library loan. The Library also provides assistance to the visually or hearing-impaired.

The Library is open to the general public. Staff assistance to students and other patrons is provided routinely.

## 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 - 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 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.

## 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-todate training in state-of-the-art facilities for someone upgrading their skills, seeking professional development opportunities, or starting a new career. Industrial maintenance, professional truck driving, nurse aide, phlebotomy, EKG technician, and other careers are among those 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 20 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 EDUCATIONAL 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 County Office of Alcohol and Drugs to develop a unified strategy to address and prevent the proliferation of substance abuse.

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.

The activities of the Institute are directed by a full-time chemical dependency professional that will be responsible for the continuing operation, growth and development of the Institute.

## 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 SAFETY AND SECURITY

- Item 1: Luzerne County Community College is a co-educational college located on 167 acres of land in the city of Nanticoke, Pennsylvania. The College enrolls 4,381 full-time equivalent students in the day and evening programs. The College also has 415 non-student employees working on campus. The College provides no student housing.
- Item 2: The administrative offices responsible for safety and security on the campus are the Director of Safety and Security and the Associate Dean of Administration.
- Item 3: The 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 Act 235 and receive annual training in First Aid and CPR/AED. The Director of Campus Safety and Security is a full-time administrator with twentyfive years of law enforcement experience.
- Item 4: All non-criminal incidents are referred to the Vice President of Student Development. All criminal incidents are referred to the local Nanticoke City Police Department and/or the Pennsylvania State Police. State and local police are summoned to campus to assist security officers in any way necessary. The Nanticoke Police also provide patrols through the campus.
- Item 5: In-house personnel initially handle all non-criminal and criminal incidents reported. It is left to the discretion of the investigating security 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.
- Item 6: The campus facilities are open to the campus community during the regular business hours of 8 a.m. until 10 p.m. - Monday thru Friday. For all other times, it is the responsibility of the security force to open locked doors for any sched-
uled activity. Written notices of these activities are to be sent, in advance, to the Director of Safety and Security so that arrangements can be made to open whatever facilities need to be opened. Upon completion of any activities, security will secure these facilities.
- Item 7: To report an emergency or crime, students, faculty, and staff may call, write or walk into the office of security. This office is located in Building 1, in Room 101. Emergency phones are installed in all publicly accessible buildings on campus. Activating the red phone marked "emergency" will connect you with the switchboard in Building 5. The switchboard operator has direct contact with the security department. If calling by ordinary telephone, the security department can be reached at (800) 377-5222 ext. 304 (on College phones dial extension 304). The switchboard can be reached by calling (800) 377-5222 ext. 200 or by dialing " 0 " from any campus phone. Campus Security cell phone number is (570) 239-0128.

Persons involved in handling emergencies on campus are the Director of Safety and Security, all security officers, Vice President for Student Development, and the Associate Dean of Administration. All of these individuals have been trained in handling, or at least stabilizing, most emergency situations such as fire, disturbances, and medical emergencies.

- Item 8: The consumption or possession of alcoholic beverages by students on or about campus at any time is forbidden.
- Item 9: The possession, use, or sale of illegal drugs is not allowed at any time on campus. Any member of the college community caught consuming, using, selling, providing, or possessing any illegal drug will be turned over to the local or state police for prosecution and may also be liable for dismissal from the College.
- Item 10: 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.
- Item 11: Regular patrol duties of security personnel include constant observations of conditions that render an unsafe campus environment. Any information regarding lighting, overgrown wooded areas, walkways, pathways, and deteriorated or unsafe conditions are reported to the Director of Safety and 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.
- Item 12: Firearms: The possession or use of firearms, explosives, chemicals and other lethal weapons on College property by unauthorized persons is strictly forbidden. Also prohibited are any CO 2 and spring propelled guns. Individuals who have a permit to carry a concealed firearm may not bring the firearm on campus or to College sponsored events on or off campus. Only authorized on-duty law enforcement personnel may possess a firearm on College-owned property.
- Item 13: All safety and security materials and information are currently distributed throughout the campus by means of the student newspapers and the College newsletter published by the College Relations Office. Safety materials are also posted on the campus bulletin boards and video monitors for all campus visitors to view. They are also available at www.luzerne.edu / security.
- Item 14: Crime statistics and safety and security materials are available from the Office of Student Development 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 on-line 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/.

## CRIME STATISTICS

This report indicates the known crime statistics on campus for the past three years. This information is also reported to the PA State Police on an 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).

| Crime | 2004 | 2005 | $\mathbf{2 0 0 6}$ | Crime | 2004 | 2005 | 2006 |
| :--- | :---: | ---: | ---: | :--- | :---: | :---: | :---: |
| Criminal Homicide | 0 | 0 | 0 | Receiving | 0 | 0 | 0 |
| Rape | 0 | 0 | 0 | Vandalism | 3 | 5 | 9 |
| Robbery | 0 | 0 | 0 | Uniform Fire Arms | 0 | 0 | 0 |
| Assault (simple) | 0 | 0 | 0 | Prostitution | 0 | 0 | 0 |
| Assault (other) | 0 | 0 | 0 | Sex Offenses | 0 | 0 | 0 |
| Burglary | 0 | 0 | 0 | Drug Violations | 0 | 0 | 0 |
| Theft | 10 | 17 | 24 | Gambling | 0 | 0 | 0 |
| Motor Vehicle Theft | 0 | 0 | 0 | D.U.I. | 0 | 0 | 0 |
| Arson | 0 | 0 | 0 | Liquor | 0 | 0 | 0 |
| Forgery | 0 | 0 | 0 | Disorderly Conduct | 0 | 0 | 0 |
| Fraud | 0 | 0 | 0 | All Other Offenses | 2 | 4 | 2 |
| Embezzlement | 0 | 0 | 0 | (Except Traffic) |  |  |  |

## 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:

1. Parking in an unauthorized stall or area .............................................................. $\$ 10.00$
2. Parking in a no parking zone .......................................................................... $\$ 10.00$
3. Parking in posted or yellow zones ................................................................. $\$ 10.00$
4. Parking on roadways or road berms .............................................................. $\$ 10.00$
5. Parking outside designated lines ................................................................... $\$ 10.00$
6. Parking against the flow of traffic ................................................................... $\$ 10.00$
7. Driving or parking on grass areas ...................................................................... $\$ 10.00$
8. Other parking violations ................................................................................ $\$ 10.00$
9. Double parking or parking on a crosswalk .......................................................... \$25.00
10. Obstructing driveways, delivery entrances, or creating a
hazard by parking in unauthorized areas .................................................... $\$ 25.00$
11. Running or removing a blockade / barrier ................................................... $\$ 25.00$
12. Parking within 15 feet of a fire hydrant ........................................................ $\$ 25.00$
13. Failure to register vehicle and display decal ................................................ $\$ 25.00$
14. Disregarding a security officer directive ....................................................... $\$ 25.00$
15. Driving or parking on paths or sidewalks ..................................................... $\$ 25.00$
16. Operating a vehicle in a reckless manner ....................................................... $\$ 25.00$
17. Unauthorized parking in handicapped areas ................................................. $\$ 50.00$

Vehicles may be towed without prior warning, and at the owners' expense, when;

- Parked illegally in a marked handicap parking space
- Parked overnight on campus without prior approval
- Three (3) or more unpaid parking violations exist
- Parked in such a manner as to constitute a safety hazard or impeding the normal traffic flow.


## FINES

All parking violations accrued by any driver operating a motor vehicle will be charged to the registered owner of the vehicle. Upon issuance of a fourth violation notice, a student will be referred to the Vice President for Student Development and may face disciplinary action along with driving and parking privileges on campus being revoked.

All of the previously stated fines which are not paid within 14 days from the date of issue will automatically double. Fines must be paid at the business office located in Building 5 between the hours of 9 a.m. and 4:30 p.m., Monday through Friday. Failure to pay fines will result in the holding of grades, transcripts, graduation privileges, and registration for classes.

## APPEALS

All fines must be paid before an appeal can be filed and all appeals must be filed in writing within 14 days of the date of the violation issue. Fines may be appealed in writing to the Director of Security. If a fine is not paid or an appeal filed within 14 days it automatically doubles, and the registrant is liable for all fines and costs.

Appeal forms are available from the Security Department, located in Building 1, or from the Finance Office and Switchboard, both located in Building 5.

## HANDICAPPED PARKING

The College provides a limited number of parking spaces for handicapped students. In the event a handicapped parking space is necessary, the student should obtain a request form from the Director of Campus Security whose office is located in Building 1.

Every effort will be made to accommodate the student's needs.

## 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."
3. Web pages may not be used to distribute copyrighted material without the express written consent of the copyright holder. This guideline applies to all copy written material including copy written computer software.
4. Use of CGI code without the consent of the Internet system administrator is not permitted.
5. Web pages containing material that is offensive, profane, pornographic, or discriminatory are not permitted.

## Internet Electronic Mail Guidelines:

1. Every Internet e-mail account is password protected and intended for use by a single individual. E-mail users should not share accounts or disclose their passwords to others.
2. While all electronic mail is considered private and confidential, Luzerne County Community College reserves the right 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.
4. Electronic mail messages containing material that is offensive, profane, pornographic, or discriminatory are not permitted.
Luzerne County Community College reserves the right to make changes to this policy. The latest version is available 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;
3. for students who are degree candidates at another institution (visiting students);
4. for students who have transferred to LCCC from another institution where they received a GPA of 2.0 or above upon the completion of 12 or more credits;
5. for students who are readmitted to LCCC and have received a GPA of 2.0 or above upon the completion of 12 or more credits at LCCC; or,
6. in special cases with the recommendation of the student's counselor, academic dean, the Vice President of Academic Affairs and with the approval of the President.

## DEGREE 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

1. Graduates of an accredited high school with a satisfactory record and satisfactory placement test results will be admitted to regular standing.
2. Students ranking in the lower third of the graduating class and whose placement test scores indicate deficiencies in areas important to college success will be registered for Developmental Studies Program courses. Eligibility to enroll in a full-time college program is determined on success in these courses.
3. Applicants holding a high school equivalency diploma will be enrolled in courses indicated by placement test results.
4. 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 those students accepted into the program that explore the subject with a 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 capped at 15 students, which is about half the size of a traditional class. The requirements to enter the Honors Program are as follows:

- Complete traditional Luzerne County Community College application for admission
- Graduate from high school with at least a 3.5 GPA (or) Transfer with at least 12 credits completed and a 3.25 GPA
- Score "College Level" on Accuplacer (or) be exempt from it via SAT scores
- Prepare an essay with parameters yet to be determined
- Attend a personal interview with the Program Coordinator
- Transfer students are also required to have two letters of recommendation from faculty at previous institutions
For more information contact the Honors Program Coordinator, Gina Schwartz, at 570-740-0788 or gschwartz@luzerne.edu.


## EARLY COLLEGE PROGRAMS FOR HIGH SCHOOL STUDENTS

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

## Young Scholars

Eligibility:

- Payment of tuition and fees are the responsibility of the student.
- Students who successfully complete courses will be awarded college credits.
- High school juniors or seniors.
- Placement testing is required for all new Young Scholar participants. Students whose test scores indicate the need for developmental coursework will not be eligible to take college level courses through the Young Scholar Program. (Placement testing will be waived for applicants who submit documentation of having had scored both 500+ Verbal and 500+ Math on the SATs.)
- All participants must have their high school guidance counselor recommendation.
- Participants under the age of 18 must have parental or guardian permission.
- A minimum GPA of 2.0 and a grade of " $C$ " or better in each college course attempted must be maintained for continued participation in the Young Scholar Program.
The deadline for Fall applications is the first Friday in August. The deadline for Spring applications is the last Friday in November.
Dual Enrollment
Eligibility
- Payment of tuition and fees will be arranged through the student's School District.
- Students who successfully complete courses will be awarded college and high school credits.
- High school juniors or seniors.
- Placement testing is required for all new Dual Enrollment participants. Students whose test scores indicate the need for developmental coursework will not be eligible to take college level courses through the Dual Enrollment Program.
- All participants must have their high school guidance counselor recommendation.
- Participants under the age of 18 must have parental or guardian permission.
- A minimum GPA of 2.0 and a grade of " $C$ " or better in each college course attempted must be maintained for continued participation in the Dual Enrollment Program.
The deadline for Fall applications is the first Friday in August. The deadline for Spring applications is the last Friday in November.


## 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)

1. Obtain an application from the LCCC Admissions Office, your high school guidance office, or from our website: www.luzerne.edu.
2. Complete and return the application to the Admissions Office.
3. Request your high school to forward an official high school transcript to the LCCC Admissions Office or submit a copy of your high school equivalency diploma (GED).
4. Submit a $\$ 40.00$ application fee.
5. Placement testing for academic counseling will be scheduled in the letter of acceptance.
6. 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 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. High School Transcript or High School Equivalency Diploma (GED) and Transcripts from all other institutions attended.
3. Payment of Application Fee
4. 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.
Nursing - In addition to the general Health Science Program requirements, entrance into the Nursing Curriculum has, as minimum requirements, the following: (Note - The College reserves the right to select the most qualified applicants.)
(a) Successful completion of the following high school or college courses: one year of algebra, one year of biology, and one year of chemistry with final grades of at least "C."
(b) Rank in the upper two fifths of the high school graduating class. Minimum college G.P.A. 2.0.
(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.
PA State Board of Nursing advises that a person convicted of any felonious act may be prohibited from licensure.
Dental Assisting - Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. In addition to the admissions criteria for Health Sciences Programs, admission to the Dental Assisting Program has the following minimum requirements:
(a) Graduation from an accredited secondary school or high school equivalency diploma (GED).
(b) Average to above average high school grades.
(c) Verification by signature of Required Essential Cognitive and Physical Functions of dental assisting students.
In addition to the above criteria for Dental Assisting, students wishing to pursue the Expanded Functions Dental Assisting Sequence must fulfill the following requirements:
(a) Graduate of Dental Assisting Program or Career/Tech Dental Assisting program or 1 year work experience as a full-time dental a Registered Dental Hygienist Licensure or be 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) Satisfactory completion of Dental Anatomy Entrance Examination
(i) Completion of Dentist Clearance Form

The Dental Anatomy Entrance Exam is given by the Dental Health Department. All of the above requirements must be documented and on file with your application in the Dental Health Department before you can register for the course.

Dental Hygiene - Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. In addition to the admissions criteria for Health Sciences Programs, admission to the Dental Hygiene Program has the following minimum requirements:
(a) Graduation from an accredited secondary school or high school equivalency diploma.
(b) Completion of one year of high school or college level algebra, biology and chemistry with final grades of "C" or above.
(c) Average to above average high school grades. College GPA of 2.0 or above. Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of science.
(d) Verification by signature of Required Essential Cognitive and Physical Functions of dental hygiene students.
Conviction of a felonious act may result in denial of licensure by the Pennsylvania State Board of Dentistry.

Emergency Medical Services (Paramedic Course) - In addition to the General Health Science Admissions requirements, entrance to the Paramedic courses (EMS 201, EMS 202, EMS 203) has the following minimum requirements: (Note - The College reserves the right to select the most qualified applicants.)
(a) Graduation from an accredited secondary school or high school equivalency diploma.
(b) Information session with the EMS Program Representative.
(c) Be in compliance with the rules and regulations of the Pennsylvania Department of Health, Division of Emergency Health Service pertaining to EMT Paramedic training and practice.
Surgical Technology - In addition to the General Health Science admissions requirements, entrance to the Surgical Technology Program has, as the minimum requirements, the following: (Note - The College reserves the right to select the most qualified applicants.)
(a) Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of Science.
(b) Average to above average high school grades. Successful completion of the following high school or college courses: algebra, biology, and chemistry with a final grade of "C" or above. College GPA of 2.0 or above.
(c) Verification by signature of Required Essential Cognitive and Physical Functions of surgical technology students.
Respiratory Therapy - In addition to the General Health Science Admission requirements, entrance into the Respiratory Therapy Program has, as minimum
requirements, the following: (Note - The College reserves the right to select the most qualified applicants.)
(a) Graduation from an accredited secondary school or high school equivalency diploma.
(b) Successful completion of the following high school or college courses: one year of algebra, one year of biology, and one year of chemistry, with a final grade of " C " or above.
(c) Average to above average high school grades. College GPA of 2.0 or above.

## Technology Program:

Court Reporting/Captioning - 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.

## INTERNATIONAL STUDENTS

Luzerne County Community College welcomes applications from students from other countries. In order for the College to issue the 1-20 form necessary for F-1 student visa, students must submit:

1. Complete the Application for Admissions.
2. Submit a non-refundable application fee of $\$ 40.00$ (U.S. Currency). A check must have a bar code to be accepted. Money orders are also accepted.
3. Submit an official copy of academic records from the secondary school. This is a record of courses taken and grades received, graduation date(s) and diploma or certificates received. Certified true copies of original documents are required, if an official copy cannot be sent directly from the secondary school to the Office of Admissions. When original academic credentials are not in English, certified English translations must be submitted to accompany the original documents. Submitting translations alone is not acceptable.
4. Submit a signed International Student Requirement Form stating that you read the form and fully understand your obligations if you are granted a student visa.
5. Provide evidence of financial support to cover your first year of study. This includes tuition, fees, living expenses, books, insurance, supplies, transportation and other incidentals. (Must include the current exchange rate if not in U.S. dollars. All financial documents must be less than 6 month old.)

- Submit the Affidavit of Support form. It is possible to have support from more than one source. The form may be copied to enable more than one person to submit evidence of their willingness and ability to provide support to you.
- Attach a Certified Bank Statement or letter from a bank as well as a letter from the sponsors' employer/or tax return.

6. Submit proof of English proficiency. Submit TOEFL and test scores. You must have a TOEFL score of at least 500 for the written exam or 173 for the computerized exam to continue with the admissions procedures. Additional information on TOEFL may be obtained from your nearest consular embassy or from:
TOEFL: Box 6154, Princeton, New Jersey, U.S.A. 08541-6154.
7. Submit evidence of adequate health insurance.
8. The Admissions Office must receive a complete file by the following deadlines:

- June 1 - Fall Semester
- November 1 - Spring Semester
- April 1 - Summer Semester

VISA STATUS CHANGES WILL NOT BE HANDLED BY THE COLLEGE. THE APPLICANT MUST FOLLOW IMMIGRATION AND NATURALIZATION SERVICES (INS) PROCEDURES.
U.S. IMMIGRATION \& NATURALIZATION SERVICES 1600 CALLOW HILL STREET PHILADELPHIA, PA 19130 U.S.A.

Note: All documents submitted become the property of the College, and they will not be transferred or returned.

## 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 National Secretaries Association, International. 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 ASSISTANCE WITH APPLICATIONS

Assistance with applications, information on cost and the availability of financial aid is provided through the Admissions Office. 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 forwarded to each applicant as soon as all forms in the admissions procedure have been received, evaluated and processed.

Upon acceptance by the College, the full-time student is required to submit the advance registration fee to finalize acceptance. This payment is credited toward the student's total tuition.

## 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 38-41 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

Students will be charged tuition on the basis of their residency at registration at the time they register. Once the student has gone through the registration process, the residency will not be changed throughout the course of the student's continuous enrollment with LCCC. A student is considered to be continuously enrolled when he or she enrolls for the major semesters (Fall and Spring) of each year subsequent to their initial enrollment without interruption.

Proof of residency must be submitted to the Admissions Office and will remain in effect for the term of continuous enrollment unless and until the College receives notification that the student's permanent residency has changed.

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.

## WITHDRAWAL FROM COLLEGE 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 established by the Board of Trustees of the College and are subject to change by its action. The Board of Trustees reserves the right to change tuition and fees without notice. Tuition and fees must be paid in full on or before registration day for each semester or summer session. The College accepts payment by cash, check, VISA, MasterCard or Discover. The College is not authorized to permit deferred payments except as noted below with the agreement with TuitionPay. The present schedule of tuition and fees is as follows:

(Per-Semester/Hour<br>Each Semester)<br>\$ 160.00<br>\$ 240.00

*Resident of Luzerne County .......................................................... \$ 80.00*
Other Pennsylvania Residents:
A. From an area with an established Community College ...... \$ 80.00
B. From an area with an established Community College, without approval of that College
C. From an Area with no Community College .......................... \$ 160.00
D. Out of State and International Students

* A residency policy is on file in the Admissions Office and may be checked if there seems to be a question. Students are billed immediately upon registration which completes the registration process and establishes the student's residency status for the semester.
Tuition and fees as of December 12, 2006. Rates are subject to change. The College reserves the right to change without notice the tuition and fees herein stated.


# AFFORDABLE PAYMENT OPTION: MONTHLY PAYMENT PLAN <br> (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 1-800-6350120 or www.TuitionPay.com.

## FEES

| Application Fee (Payable once, non-refundable, this fee is assessed for the processing of all admissions forms and materials): $\qquad$ | Full-Time (Per Semester) |  | Part-Time (Per Semester) |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 40.00 |  | 40.00 |
| Withdrawal Fee (This fee is assessed to cover supplemental costs incurred when a student finds it necessary to withdraw before classes commence): $\qquad$ \$ 15.00 <br> \$ 15.00 |  |  |  |  |
|  |  |  |  |  |
| General Service Fee (This fee supports |  |  |  |  |
| Technology Fee (This fee is to defray the institutional operating costs associated with providing students access to technology in academic and student support services and in instructional programs): <br> \$ 6.00* <br> \$ 6.00* |  |  |  |  |
| Capital Fee (This fee is assessed to all nonsponsored students) |  |  |  |  |
| Out-of-County. |  | 10.00* |  | 10.00* |
| Out-of-State/Internationa |  | 20.00* |  | 20.00* |
| Late Registration Fee (This fee is assessed to cover supplemental costs incurred when the student registers after the date stipulated in the College Calendar): <br> \$ 15.00 <br> \$ 10.00** |  |  |  |  |
| Advanced Registration Fee (The amount of this non-refundable fee will be applied toward tuition for the specific semester for which the fee is required; payment of this fee is necessary to guarantee the student a space in class): |  |  |  |  |
| 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 |  |  |  |  |
| Transcript Fee (For both hard and faxed copies) |  | 5.00 |  | 5.00 |
| Course Change Fee (This fee is charged to cover supplemental costs incurred when the student alters his registration form after he |  |  |  |  |
| Returned Check Fee (This fee is charged for checks returned to the College because of insufficient funds upon request for payment): ..... \$ 25.00 \$ 25.00 |  |  |  |  |
| Graduation Fee (This non-refundable fee is for processing the application for graduation.) $\qquad$ \$ 50.00 <br> \$ 50.00 |  |  |  |  |
| Course Fee (This fee is charged for courses that require additional materials, supplies, other instructional costs and/or to allay the maintenance expense of required instructional <br> Please refer to schedule equipment): of fees on pages 43 and 44 |  |  |  |  |
| Processing Fee (For duplicate <br> schedules, duplicate receipts, etc.): $\qquad$ \$ 2.00 <br> \$ 2.00 |  |  |  |  |
| Advanced Placement Fee (Students receiving advanced placement credits as a result of successfully completing Luzerne County Community College departmental challenge examinations will be responsible to pay a per credit fee equal to the current tuition per credit rate. Advanced placement received through external procedures such as the |  |  |  |  |


|  | Full-Time (Per Semester) | Part-Time (Per Semester) |
| :---: | :---: | :---: |
| college entrance examination board, the college |  |  |
| level examination program (CLEP), or TACKLE |  |  |
| programs will be assessed the fees as dictated by |  |  |
| the respective program. No advanced placement |  |  |
| credits will be granted until the appropriate feesare paid). |  |  |
| Distance Learning Fee (This fee is for costs in |  |  |
| producing and licensing Distance Learning |  |  |
| materials): ................................................... | $\begin{aligned} & \$ 40.00 \\ & \text { Per Course } \end{aligned}$ | \$ 40.00 |
| Record Reproduction Fee (This fee is to cover |  |  |
| costs associated with reproducing records that |  |  |
|  | \$ 25.00 |  |
| * Per Semester Hour |  |  |
| ** Students enrolled for less than 12 semester hours |  |  |
| Note: The College reserves the right to assess fees that may not be listed in the |  |  |
| Fee Schedule. Students taking non-credit courses including worksho |  |  |
| and seminars 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):

## Fall and Spring 15 Week Semesters (Day, Evening, Off-Campus and Weekend Classes)

Until the end of the first week of scheduled classes ..... 75\%
Until the end of the second week of scheduled classes ..... 50\%
Until the end of the third week of scheduled classes ..... 25\%
After the third week of scheduled classes ..... No Refund
Summer Session(Day and Evening Classes Scheduled 4 Days Per Week)
Until the end of the second day of regularly scheduled classes ..... $75 \%$
After the end of the second day and until the end of the fourth day of regularly scheduled classes ..... 50\%
After the end of the fourth day of regularly scheduled classes ..... No Refund
Special Fall / Special Spring / Summer Session
(Day, Evening, Off-Campus and Weekend Classes Scheduled 1 Day Per Week)
Until the end of the first week of scheduled classes ..... 75\%
Until the end of the second week of scheduled classes ..... 50\%
After the second week of scheduled classes

## 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 (\$37.00 EACH COURSE)

| ACC 121 | CEL 122 | CIS 213 | COM 209 | HPE 246 | OMT 126 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AMT 103 | CEL 130 | CIS 240 | COM 214 | HRT 102 | OMT 127 |
| AMT 104 | CEL 132 | CIS 242 | COS 230 | HRT 104 | OMT 133 |
| ARC 110 | CHE 131 | CIS 250 | CST 215 | HRT 105 | OMT 140 |
| ARC 112 | CIS 106 | CIS 252 | CST 225 | HRT 106 | OMT 147 |
| ARC 116 | CIS 110 | CIS 254 | ENG 029 | HRT 107 | OMT 154 |
| ARC 205 | CIS 111 | CIS 258 | ENG 030 | HRT 113 | OMT 233 |
| ARC 210 | CIS 112 | CIS 260 | tENG 101 | HRT 115 | OMT 234 |
| ARC 213 | CIS 114 | CIS 263 | ENG 261 | HRT 201 | OMT 235 |
| ARC 217 | CIS 116 | CIS 290 | EET 120 | HRT 203 | PLH 105 |
| ARC 219 | CIS 120 | CIS 291 | EET 125 | HRT 205 | PLH 112 |
| ARC 226 | CIS 130 | CIS 292 | EET 131 | HRT 210 | PLH 114 |
| ART 200 | CIS 132 | CIS 293 | EET 132 | HRT 220 | PLH 118 |
| ASR 101 | CIS 134 | CIS 294 | EET 135 | HRT 222 | PLH 120 |
| ASR 203 | CIS 140 | CIS 295 | EET 201 | JOR 101 | RDG 019 |
| ASR 205 | CIS 142 | CIS 296 | EET 205 | JOR 102 | RDG 020 |
| ASR 207 | CIS 150 | CIS 297 | EET 224 | JOR 103 | SCI 090 |
| BIO 120 | CIS 152 | CIS 298 | EET 226 | JOR 201 |  |
| CAD 102 | CIS 156 | CIS 158 | COM 101 | EET 228 | LAP 101 |
| CDT 201 | CIS 160 FEE |  |  |  |  |
| CDT 203 | CIS 180 | COM 102 | GET 107 | LAP 102 | OMT 119 |
| CDT 204 | CIS 182 | COM 106 201 | GET 113 | MAT 040 |  |
| CEL 101 | CIS 184 | COM 202 | GET 1181 | MAT 049 |  |
| CEL 120 | CIS 186 | COM 205 | GET 234 | MAT 060 |  |
| CEL 121 | CIS 211 | COM 206 | HPE 131 | OMT 125 |  |

## COURSE FEES (\$42.00 EACH COURSE)

BIO 222 HAC 101 HAC 103 HRM 109
PLH 102 PLH 222
PLH 101

## COURSE FEES (\$47.00 EACH COURSE)

| CAR 132 | CAR 240 | CAR 264 | CAR 273 | CAR 284 | HPE 154 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CAR 133 | CAR 241 | CAR 265 | CAR 274 | CAR 286 | HPE 231 |
| CAR 201 | CAR 242 | CAR 266 | CAR 275 | CAR 291 | HPE 201 |
| CAR 202 | CAR 244 | CAR 267 | CAR 276 | CAR 293 | INT 135 |
| CAR 203 | CAR 245 | CAR 268 | CAR 277 | CAR 294 | INT 230 |
| CAR 204 | CAR 260 | CAR 269 | CAR 278 | CAR 295 | INT 235 |
| CAR 205 | CAR 261 | CAR 270 | CAR 279 | HPE 111 | KBD 220 |
| CAR 220 | CAR 262 | CAR 271 | CAR 280 | HPE 126 | KBD 230 |
| CAR 239 | CAR 263 | CAR 272 | CAR 283 | HPE 128 | KBD 235 |

## COURSE FEES (\$55.00 EACH COURSE)

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

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## COURSE FEES (\$58.00 EACH COURSE)

| AUT 101 | AUT 110 | AUT 120 | AUT 134 | MST 105 | MST 113 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AUT 102 | AUT 111 | AUT 122 | AUT 135 | MST 106 | MST 114 |
| AUT 103 | AUT 112 | AUT 123 | CEL 103 | MST 107 | MST 115 |
| AUT 105 | AUT 116 | AUT 124 | CEL 112 | MST 109 | MST 117 |
| AUT 106 | AUT 117 | AUT 128 | MST 100 | MST 110 |  |
| AUT 108 | AUT 118 | AUT 130 | MST 101 | MST 111 |  |
| AUT 109 | AUT 119 | AUT 131 | MST 103 | MST 112 |  |

## COURSE FEES (\$68.00 EACH COURSE)

MEI 121 MEI 124 MEI 126 MEI 128 MEI 132 HRM 140
MEI 122

## COURSE FEES (\$79.00 EACH COURSE)

| COM 104 | DAS 114 | EMS 101 | HRM 217 | IET 230 | SUR 101 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DAS 101 | DHY 102 | EMS 201 | IET 103 | RTT 105 | SUR 102 |
| DAS 102 | DHY 104 | EMS 202 | IET 210 | RTT 111 | SUR 103 |
| DAS 103 | DHY 105 | EMS 203 | IET 215 | RTT 121 | SUR 104 |
| DAS 111 | DHY 114 | EMS 206 | IET 220 | RTT 131 |  |
| DAS 112 | DHY 122 | HRM 122 | IET 225 | RTT 225 |  |

COURSE FEES (\$85.00 EACH COURSE)
HRT 109 HRT 111

## COURSE FEES (\$110.00 EACH COURSE)

CUL 106 DHY 112 HRM 101 PAS 101 RTT 112

## COURSE FEES ( $\$ 135.00$ EACH COURSE)

CUL 102 CUL $104 \quad$ CUL $105 \quad$ HRM $126 \quad$ PAS $102 \quad$ PAS 103

## COURSE FEES (\$140.00 EACH COURSE)

DAS 290 DHY 202 DHY 212

## COURSE FEES (\$155.00 EACH COURSE)

NUR 101 NUR 102 NUR 203

## COURSE FEES (\$160.00 EACH COURSE)

PAS 106

## COURSE FEES (\$180.00 EACH COURSE) <br> NUR 204 CUL 103 CUL 110 PAS 105

## COURSE FEES (\$185.00 EACH COURSE)

RTT 232

## AVIATION FLIGHT SCHOOL FEES

See page 223 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.
1.) Excused absence will be considered when there is a death in the family, extended illness, representing the College in an official capacity as determined by the appropriate division or department, or other unavoidable circumstance.
2.) When a student is ill and unable to attend classes for a one week period or more, the Health Services Office should be contacted and notification will be sent to the student's instructors. A physician's statement may be required prior to the student returning to the classroom.
An absence due to an illness lasting less than one week should be reported directly to the student's instructors by the student.
3.) When a student anticipates being absent from class for an extended period of time he or she should notify the Academic Affairs Office who will then notify the student's instructors.
4.) Unexcused absence will constitute any absence not approved by the College.

Students in Health Programs who, because of excessive absences received a grade of "I" (incomplete), and have to make up clinical time at the end of a semester, will be charged a 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 sent to sudents at the end of each semester or session.
LetterGrade DefinitionGrade Points
A Academic achievement of superior quality ..... 4.0
B+ Academic achievement above high quality ..... 3.5
B Academic achievement of high quality ..... 3.0
C+ Academic achievement above satisfactory quality ..... 2.5
C Academic achievement of satisfactory quality ..... 2.0
D+ Academic achievement above the minimal quality required for course credit ..... 1.5
D Academic achievement of minimal quality required for course credit ..... 1.0
F Academic achievement below the minimum required for course credit. Failure. ..... 0.0
W Official Withdrawal ..... -(A student may withdraw from a course up to and including the tenthweek of the semester with a W grade on his/her record. W grades do notaffect the student's GPA.
I Incomplete Work(A temporary grade given in cases when the student is unable to completethe semester's work or the final examination because of illness or othercircumstances beyond his or her control. The student must present validreasons for the work missed and must arrange with the instructor to makeup the work during the following semester; otherwise, the "I" automati-cally becomes an "F". Students should initiate the request for Incompletegrades.)
IE Incomplete Writing Competency Examination

S Audit (No Credit)
P Successful Completion of Course -
R Unsuccessful Completion of Course - Re-Take
Each student receives a final grade report for the semester after the closing of each semester.

A student who earns a grade of " $\mathrm{D}, \mathrm{D}+$ 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.

Students who receive "W" and/or "F" in more than fifty percent (50\%) of their courses after having attempted a minimum of 21 hours shall be required to submit a letter to the Academic Affairs Office explaining why they should be allowed to continue at the College. The Academic Affairs Office will review these petitions and then recommend one of three actions be taken:

1. The student be suspended for lack of satisfactory progress.
2. The student be placed on academic probation, limited to a maximum of nine semester hours of work and complete these semester hours with a minimum of a " $C$ " in each course. The student must spend a reasonable amount of time in counseling or advising sessions (what is reasonable will be determined by the counselor or advisor).
3. No action be taken due to extenuating circumstances.

## 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:

1. Communicating with another student about the examination material during an examination.
2. Using materials not authorized by an instructor such as notes and textbooks.
3. Looking at another's examination.
4. Seeking or offering aid during an examination.
5. Illegally obtaining or distributing an examination.
6. 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 Vice President Student Development 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 $\qquad$ 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 41 for information relative to refund during the first three weeks of classes.

Students are permitted to enter day and evening courses until the end of the first week of the semester.

## AUDITING A COURSE

By consent of the instructor and the academic dean, any person may enroll as an auditor for a desired credit course. The auditor pays the regular tuition and fees applicable to the part-time student, is expected to attend all lecture and laboratory classes, but is not required to write examinations. The auditor receives neither a grade nor credit for his/her work. A student must declare his/her intention for the audit by the end of the second week of the semester. A student cannot audit the clinical component of a nursing course.

## ACADEMIC PROBATION

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

| Total Credits | Academic <br> Probation | Satisfactory <br> 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 semesterhours 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.
2. Students not meeting this minimum requirement will be suspended for the next major semester. Upon re-admission and acceptance the student will be required to maintain a minimum 2.0 semester average for each major semester.
3. Students failing to meet the 2.0 major semester average after a suspension will be academically dismissed.
4. Academic dismissal renders a student ineligible for re-admission for a period of two years from the point of dismissal. At the time of readmission all F grades will be deleted from G.P.A. calculations.
NOTE: Students may appeal their suspension status through the Office of the Academic Vice President. If accepted the student will receive a hearing with the Suspension/Appeals Board.

## 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

Grades will be mailed to students as soon as possible, usually within two weeks following the final examination period. Grade information will not be 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 Vice President of Student Development 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.

1. Student must submit an application for graduation with a $\$ 50.00$ application fee (this is a non-refundable fee) to the Business Office no later than FRIDAY, FEBRUARY 22, 2008.
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 E 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: College Misericordia, 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 | European History |
| :--- | :--- |
| Biology | Mathematics |
| Chemistry | 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
Information System Technology
Electronics
Computer Science

* See Writing Competency Exam Requirements, p. 48.


## 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. 48.

## 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. 48.

## 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 learning 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 Commumity 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:

1. 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/NEW OPTIONS CAREER DEVELOPMENT PROGRAM

The New Choices/New Options Career Development Program assists single parents, homemakers, and persons interested in exploring job opportunities which have traditionally been held by the opposite gender.

To be eligible, an individual must be a single parent, homemaker, or a student who is enrolled in a non-traditional curriculum (percentage of gender bias is greater than $75 \%$ ). Persons must also meet certain financial eligibility guidelines.

Services include career, academic, and personal counseling as well as tuition assistance. 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.

Funding is made possible through the Pennsylvania Department of Education. For further information, contact the New Choices/New Options Career Development Program by calling (800) 377-5222 extension 606 or 563.

## 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 this policy is in "excess" of the student's Primary Insurance carrier. Benefits payable under this Policy include any remaining balances after the student's Primary Insurance carrier has paid the usual and customary fees, less the twenty-five dollar deductible. This insurance program covers all fulltime 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. 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.

## EMERGENCY PROCEDURES

In case of an accident or illness requiring emergency action, the following procedure will be activated:
I. DAYTIME HOURS: 8:00. A.M.-4:00 P.M.

1. Contact the College switchboard by dialing 0 or using the RED emergency phones located in most buildings.
Provide the College Operator with the following information:

- Location of the accident or illness
- Student involved (if available)
- Type of emergency

2. The College operator will notify Campus Security and the Vice President of Student Development.
3. The College will immediately respond to provide assistance and determine the need for community emergency assistance.
II. EVENING HOURS: after 4:00 P.M.
4. Contact the College switchboard by dialing 0 or by using the RED emergency phone located in each building. The switchboard operator will relay the information to the Security Officer and the Evening Administrator. They will contact, direct and supervise all other personnel.

## III. WEEKEND HOURS:

1. There is no switchboard operator available on weekends. Security can be reached by calling (800) 377-5222 ext. 304 or by cell phone at 570-2390128.

## 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.

## 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 pro-

| NAME OF PROGRAM | SOURCE | AWARD AMOUNTS | ELIGIBILITY | HOW TO APPLY |
| :---: | :---: | :---: | :---: | :---: |
| Federal PELL GRANT | Federal Government | Annual awards may range from $\$ 400$ to $\$ 4,310$. | Students who are enrolled and pursuing a diploma, certificate or an associate degree are potentially eligible. <br> Applicants must be a U.S. citizen, U.S. permanent resident, or an eligible non-citizen with proper ID. <br> Students must also maintain academic progress as is outlined in the College Handbook. | Complete the Free Application for Federal Student Aid and the LCCC Financial Aid Application. All necessary applications are available in the Financial Aid Office. Applicants must reapply each year. |
| Federal SEOG <br> Supplemental Educational Opportunity Grant | Federal Government | Minimum annual award of \$200 |  |  |
| FWSP <br> Federal Work Study Program | Federal Government | Annual awards at L.C.C.C. range from $\$ 400$ to $\$ 2,400$ |  |  |
| FEDERAL STAFFORD LOAN (Formerly Guaranteed Student Loan | Federal Government/ Pa. Higher Education Assistance Agency | \$3,500 maximum per grade level for freshmen and $\$ 4,500$ for sophomores | Students who have fulfilled the requirements for bachelors 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 | Annual 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 <br> (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. <br> 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 <br> Rehabilitation <br> Education Assistance | State <br> 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. |

grams. The actual amount of your Pell Grant will be based on the number of credits you are enrolled for after the College's refund period ends. Refer to "Withdrawals and Refunds" in the College Catalog. Pell Grant awards range from $\$ 400$ to $\$ 4,310$ per year.

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 parttime 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.

## 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 fixed at $6.8 \%$. 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 $\$ 3,500$ for the academic year. Those students with 30 credits or more can borrow a maximum of $\$ 4,500$ per academic year.

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 secondhalf 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. Students 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

* 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.
3. It will take approximately four to six weeks to process the FAFSA form, please file early.
4. 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.
6. 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.

## I. ACADEMIC

## DR. RICHARD ALLEY SCHOLARSHIP

G.P.A. Required: 3.5 or higher

Established in 1996 by Dr. Richard A. Alley, former LCCC Trustee. Applicant must demonstrate humanitarianism, academic achievement, and have unmet financial need. Applicant must have earned 12-40 credits, be enrolled in at least six credits per semester and have a commitment to volunteerism.

## DR. RICHARD A. ALLEY SCHOLARSHIP

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## FRANK P. CROSSIN SCHOLARSHIP

## G.P.A. Required: 3.5 or higher

Established by the LCCC Board of Trustees in memory of Mr. Crossin, former County Commissioner and College Trustee. Applicant must be a graduate of a Luzerne County high school and show strong academic potential. The award will cover tuition costs only for four consecutive semesters at LCCC. Include a copy of your score from the college assessment test or college standard aptitude test (SAT).

## DENTAL HYGIENE ASSOCIATION ACADEMIC SCHOLARSHIP

## G.P.A. Required: 3.5 or higher

This scholarship is made possible through the generosity of Northeast Pennsylvania Dental Hygiene Association. Applicant must be entering his or her
second year of the Dental Hygiene Curriculum, demonstrate scholastic aptitude and the potential for success in the field of dental hygiene and be a member of the Student American Dental Hygienists' Association.

## CHARLES GELSO, ESQUIRE MEMORIAL SCHOLARSHIP

G.P.A. Required: 3.5 or higher

Established in 2002 by the LCCC Board of Trustees in memory of Atty. Charles Gelso, former College Trustee. Applicant must be a graduate of a Luzerne County high school, demonstrate good character and show outstanding academic achievement. Include a copy of your score from the college assessment test or college standard aptitude test (SAT).
THE JOSEPH J. KURPIS SCHOLARSHIP

## G.P.A. Required: 3.5 or higher

Established in 1990 by the LCCC Board of Trustees in memory of Joseph Kurpis, former College Trustee, for his dedicated service to the College and the community. Applicant must demonstrate good character and show outstanding high school or college academic achievement. The award will cover tuition costs only for two consecutive semesters at LCCC.

## LUZERNE COUNTY COMMUNITY COLLEGE PRESIDENTIAL SCHOLARSHIP

G.P.A. Required: 3.5 or higher

Established by the LCCC Board of Trustees in 1999 to recognize an outstanding graduate from each Luzerne County public high school. Applicant must demonstrate outstanding academic achievement and show a commitment to extracurricular activities during high school. Letters of recommendation must be from a guidance counselor or teacher.

## DR. JAMES M. TOOLE SCHOLARSHIP

## G.P.A. Required: 3.5 or higher

Established by the LCCC Board of Trustees in 1991. Applicant must show outstanding academic potential as measured by high school grades and scores on the college assessment test. Applicant should apply in the spring semester (prior to their first semester at LCCC) for award in the fall. Include a copy of your score from the college assessment test or college standard aptitude test (SAT).

## JAMES M. WACHTLER ENDOWMENT SCHOLARSHIP

GPA Required: $\quad 3.5$ or higher
James M. Wachtler, a former Luzerne County Community College Trustee, established this scholarship in 1978. Applicant must have academic potential as measured by the composite score from the college assessment test and high school record. Preference is given to applicants with unmet financial need. Include a copy of your score from the college assessment test or college standard aptitude test (SAT).

## ALBERT WASLEY MEMORIAL SCHOLARSHIP

G.P.A. Required: 3.5 or higher

Established in 2002 by the LCCC Board of Trustees in memory of Mr. Albert Wasley, former Luzerne County Community College Trustee. Applicant must be a graduate of a Luzerne County high school and demonstrate outstanding high school or college academic achievement and good character. Include a copy of your score from the college assessment test or college standard aptitude test (SAT).

## II. CURRICULUM

## Automotive Technology/Motorsports Technology Scholarships <br> JOSEPH AMATO SCHOLARSHIP

Given annually by the JA Foundation. Applicant must be currently involved in the Motorsports field and have at least 24 credits earned at the time of award. This award is not based on financial need.

## NEP - AACA - NANCY BOBACK MEMORIAL SCHOLARSHIP

Established in 2007 in memory of Nancy Boback, by the members of the regional chapter of the AACA to benefit a student in LCCC's Automotive Program. Applicant must have completed 15 credits in the Automotive Technology curriculum and be in good academic standing.

## NEP - AACA - ANITQUE AUTOMOBILE CLUB ASSOCIATION SCHOLARHSIP

Established in 2000 by the members of the regional chapter of the AACA to benefit a student in LCCC's Automotive Program. Applicant must have completed 15 credits in the Automotive Technology curriculum and be in good academic standing.

## THE DANIEL W. BEYNON MEMORIAL SCHOLARSHIP

Established in 2000 by Sandra Beynon Nicholas, Executive Director, LCCC Foundation. Applicant must have unmet financial need. First preference will be given to a student enrolled in the Automotive curriculum.

## MICHAEL J. CEFALO, ESQ. SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Given annually by Attorney Michael J. Cefalo, West Pittston. Applicant must be in his or her second year of LCCC's Motorsports program, actively involved in Motorsports and have 30 credits earned at the time of award.

## GENERAL MOTORS TRAINING COUNCIL SCHOLARSHIP

G.P.A. Required: 2.0 or higher

Established in 1993 by the Northeast Region General Motors Dealers Training Council. Applicant must be a second year, part-time student of the Automotive Technology program.

## GENERAL MOTORS TRAINING COUNCIL SCHOLARSHIP

(Full-time incoming freshman)
Established in 1993 by the Northeast Region General Motors Dealers Training Council. To be awarded to a high school senior who will be attending LCCC on a full-time basis and enrolled in the Automotive Technology curriculum. (Applicant should apply in the spring semester of their senior year of high school for award in the fall).

## MOROSO PERFORMANCE SCHOLARSHIP

G.P.A. Required: 2.75 or higher

This award was established in 2000 by Moroso Performance Products, one of the word's most respected suppliers of automotive equipment for racing and street performance applications. Recipient must be a second year student in the Motorsports Technology Program.

## NHRA-NORTHEAST TRACK OPERATORS SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Sponsored annually by the National Hot Rod Association. Applicant must be enrolled in LCCC's Motorsports Technology program, completed at least 15 credits in the program and be enrolled in at least 6 credits per semester.

## NHRA DIVISION 1 AL BROWN MEMORIAL SCHOLARSHIP

## G.P.A. Required: 2.5 or higher

Sponsored annually by the National Hot Rod Association. Applicant must have completed at least 15 credits in LCCC's Motorsports Technology program and be enrolled in at least 6 credits per semester.

## Broadcast Communications

## CHESTER SAWICKI SCHOLARSHIP

Established in 2003 by David J. Sawicki, Director, Business \& Industry Education at LCCC in honor of his father. Applicant must be enrolled in the Broadcast Communications curriculum and have a strong commitment to learning the field. Letters of reference from instructors should express applicant's potential in the Broadcast Communications field.

## Business Field/Office Management Technology Scholarships DOROTHEA B. McCUTCHEON ENDOWED SCHOLARSHIP

Established in 1984 by George and Dorothea McCutcheon. Applicant must be a full-time, second-year Office Management Technology student entering his or her final year of the program and be involved in extracurricular activities.

## MERICLE COMMERCIAL REAL ESTATE SERVICES ENDOWED SCHOLARSHIP

Established in 1998 by Robert K. Mericle and endowed in 2000. Applicant must have completed nine college credits prior to applying for this award and be enrolled in a business course of study. Special consideration will be given to students who are currently working in the Real Estate profession. First preference will be given to students with financial need.

## SYLVIA A. SENYK MEMORIAL ENDOWED SCHOLARSHIP

This scholarship was established and endowed in 2002 by Basil Senyk, Professor Emeritus at Luzerne County Community College in memory of his wife, Sylvia A. Senyk. Applicant must have 30 credits toward a business related degree in areas of paralegal, international business, health care administration, purchasing in the Business Administration or Business Technology Curriculum. Preference will be given to students with financial need.

## BASIL SENYK, C.P.M. SCHOLARSHIP

Established in 2007 by the National Association of Purchasing Managers, Northeast PA, in honor of Basil Senyk, C.P.M. Professor Emeritus at LCCC. Applicants must be enrolled in the second year of a business related field, with a 3.0 GPA. First preference will be given to students with financial need.

## WACHOVIA BANK ENDOWED SCHOLARSHIP

Established in 1998. Applicant must be enrolled in any one of the following curricula: Accounting Technology, Banking, Business Administration, Business Management Technology, Computer Science, Computer Systems Technology or International Business.

## Education

## ROBERT A. JANOSOV MEMORIAL ENDOWED SCHOLARSHIP

Established and endowed in 2006 by wife Teddi M. Janosov, family, friends and colleagues. The award is in memory of Professor Emeritus Robert A. Janosov, for his commitment of 35 years to Luzerne County Community College and the history of our region. Applicant must have a career interest in the field of Education with a concentration in History and demonstrate an involvement in the community.

Applicant must be entering their second year and have a 2.5 GPA while enrolled at LCCC. Applicants must not be the recipient of financial aid. Obtain one letter of recommendation from any LCCC instructor and two letters from community members (non family).

## Emergency Medical Services / Fire Safety Technology / Paramedic THOMAS GUSHER, JR. MEMORIAL SCHOLARSHIP

Established in 1998 by friends and family of the late Thomas Gusher, an LCCC graduate who dedicated his life to helping others survive and recover from medical problems. Applicant must be enrolled in the EMS program and demonstrate community volunteerism and humanitarianism. Preference will be given to an active volunteer fire fighter.

## Health Care Curriculum Scholarships <br> BLUE CROSS OF NORTHEASTERN PENNSYLVANIA ENDOWED SCHOLARSHIP

Established and endowed in 1998. Applicant must be enrolled in one of the following programs of study: Business Administration, Health Care Management, Accounting Technology, Business Management Technology, Health Care Management, Information System Technology, Nursing, Office Management Technology, Medical Office Assistant/Transcriptionist.

## DENTAL HYGIENE ASSOCIATION FINANCIAL NEED SCHOLARSHIP

G.P.A. Required: 2.5 or higher

This scholarship is made possible through the generosity of Northeast Pennsylvania Dental Hygiene Association, a professional association that promotes continuing education, networking, placement and professionalism in the field of dental hygiene. Applicant must be entering his or her second year of the Dental Hygiene Curriculum and be a member of the Student American Dental Hygienists' Association.

## VERNE \& WILLIAM R. GELATKO MEMORIAL SCHOLARSHIP

Loree Gerich, member of the Nursing faculty, presents this award annually in memory of her father, William R. Gelatko. Applicant must be a second semester student who has completed Nursing 101, demonstrates a genuine caring and empathetic attitude to their clinical clients; shows a strong ability to perform nursing skills and participate or volunteer with college, community or civic organizations.

## GOLDEN CARE OF NEPA SCHOLARSHIP

Established in 2006 by Golden Care of NEPA. Applicant must be pursuing a degree in the Nursing field, be involved in community activities and have financial need.

## ANGELINE ELIZABETH KIRBY MEMORIAL SCHOLARSHIP

Established in 2003 by the Board of Directors of the Angeline Elizabeth Kirby Memorial Health Center. Applicant must be enrolled in the Nursing program and have financial need.

## DAVID W. KISTLER. M.D. SCHOLARSHIP

Presented by the Penn State Geisinger Wyoming Valley Medical Center Staff to honor Dr. David Kistler and thank him for his many years of service as chief of staff. Applicant must be a freshman student who is a resident of Luzerne County and is studying toward a career in a health care related field. Grades, student's character, community involvement and accomplishments will be given special consideration in selecting the recipient.

ABRAHAM AND ANNA NEDDOFF MEMORIAL NURSING SCHOLARSHIP
Established in 1998 by Dr. Jane Brown, former Director of Nursing at LCCC, in memory of her parents. Applicant must be entering their second year of LCCC's Nursing program. Applicant must demonstrate an exemplary understanding of the curriculum and clinical setting, and have a compassionate and caring manner during interaction with clients as reported on the students' clinical behavior evaluation record.

## ANGELA M. PARRELLA MEMORIAL SCHOLARSHIP

This award was established and endowed in 2003 by Ms. Rosella Fedor in memory of her aunt, Angela M. Parrella. Applicant must be an adult learner/non-traditional student entering their second year of the LCCC Nursing program and be in good academic standing. Special consideration will be given to students showing dedication and strong work ethic.

## GRACE PESAVENTO MEMORIAL SCHOLARSHIP

## G.P.A. <br> 2.5 or higher

Established in 2001 by Ann Isaacs, this award is presented annually in memory of her mother, Grace Pesavento. Applicant must be enrolled in the Nursing program and be interested in pursuing an RN Degree. Applicant must have unmet financial need.

## FRANCES E. RICK MEMORIAL ENDOWED NURSING SCHOLARSHIP

Established in 1990 by the late Carl J. Rick in memory of his wife, Frances E. Rick. Applicant must be entering their first year of the Nursing program. Students who have not been officially accepted into the Nursing program by the scholarship application deadline may also apply. Applicant must be enrolled full-time, be involved in school, community or career activities and a resident of Luzerne County.

## THE LISA J. ROWLEY SCHOLARSHIP

This scholarship was established in 1999 through the generosity of the friends of Lisa J. Rowley, who served the College for seventeen years as a faculty member and director of the dental health department. Through her dedication, perseverance and determination the dental health programs became a strong, wellrespected asset to the College and dental community. Scholarship selection is based on demonstrated financial need and the ability to genuinely care about people.
THE RUTH AND SIDNEY SEEHERMAN MEMORIAL ENDOWED NURSING SCHOLARSHIP
G.P.A. Required: 2.5 or higher

Established in 1990 by son, Howard and daughter, Judith and the LCCC Nursing Forum in memory of Ruth Seeherman who was LCCC's Director of Nursing from 1983 to 1993. Applicant must have successfully completed their first year of the Nursing program and be employed at least 20 hours or more per week. Special consideration given to applicants involved in school, community, or career activities.

## Hotel and Restaurant Management Scholarships BEDWICK FAMILY ENDOWMENT SCHOLARSHIP***

Based on: Academic Achievement
This scholarship will be awarded to a student graduating from Wilkes-Barre Area Vocational Technical School who is enrolled in the Hotel \& Restaurant Management curriculum in the fall semester following graduation. The application package and guidelines are available through the Counseling Office at Wilkes-Barre Area

Vocational Technical School. Applicant should apply in the spring semester of their senior year of high school for award in the fall. *** Requires Separate Scholarship Application obtainable from Wilkes-Barre Area Vocational Technical School.

## CHEF'S ASSOCIATION SCHOLARSHIP*

Applicant must be enrolled in the Food Production program at LCCC and demonstrate involvement in community activities.

* Applicant must also submit a self- created menu based on regional ingredients.


## JAMES P. MALKAMES MEMORIAL SCHOLARSHIP

Applicant must have completed a minimum of 15 credits at LCCC and be enrolled in the Hotel and Restaurant program. Special consideration will be given to students working in the hotel or restaurant management field and involved in extra-curricular activities.

## RICHARD J. NEMETZ SCHOLARSHIP

Established in 2006 in memory of Richard Nemetz who had a great love of baking and cooking. He was a pillar of strength in his church and community. This award is sponsored by the LCCC Pastry Arts Club and his son, Richard Nemetz. Applicant must be enrolled in the Pastry Arts curriculum, be involved in community activities and have financial need. GPA requirement is 2.5 or higher.

## EDWARD A. NOVITSKI MEMORIAL SCHOLARSHIP

Established in 2006 by Lisa and Steve Novitski, this award is presented annually in memory of Edward A. Novitski. Applicant must be pursuing a degree in one of LCC's Hotel \& Restaurant programs and also be active in college or community activities. Preference will be given to student with unmet financial need.

## WAYNE SCHMOLL MEMORIAL SCHOLARSHIP

Established in 2007 by Keyco Distributors, Inc., Polar Bear Refrigeration \& Air Conditioning, Inc. and Maitre D'Foods, Inc. by Chef John Hudak. This scholarship is in memory of Wayne Schmoll, Keyco's Outlet Store Supervisor for 22 years, who passed away after a battle with diabetes. Students must be enrolled in the Hotel Restaurant Management curriculum and demonstrate involvement in the field by being willing to join the Chef's Association and attend the Keyco Food Show. One letter of recommendation must come from an instructor in the Hotel Restaurant Management curriculum.

## THE WOODLANDS INN \& RESORT SCHOLARSHIP

Applicant must have completed a minimum of 15 credits at LCCC, be enrolled in the Hotel and Restaurant program and show a strong potential to achieve in this field.

## Health, Physical Education \& Movement Sciences

## MARY E. BREZINSKI MEMORIAL ENDOWED SCHOLARSHIP

Established by the Brezinski family in 1999 in memory of Mary E. Brezinski, an LCCC faculty member who taught aerobics for 30 years. Applicant must be enrolled in a Health, Physical Education \& Movement Sciences curriculum and exhibit dedication to the field. One letter of recommendation is required from an LCCC faculty member in the Physical Education department.
RUBY CARMON ENDOWED SCHOLARSHIP
Funded annually through the Ruby Carmon Golf Tournament organized by the Physical Education faculty. Applicant must be enrolled in the Recreational Leadership and Physical Education Program at LCCC and demonstrate involvement in the community or college activities as volunteers.

## Journalism Scholarships

## JON OUTT MEMORIAL SCHOLARSHIP

Established in 1992 by the parents of the late Jon Outt, a former LCCC Journalism student. Applicant must be entering their second year of the Journalism program and participate in volunteer/ extra-curricular activities.

## ROB SAGER MEMORIAL SCHOLARSHIP

Established in 2002 by friends and family of Rob Sager. Applicant must be enrolled in the Journalism program at LCCC and assist with the publication of the student newspaper.

## THE TIMES LEADER SCHOLARSHIP

Established in 2004. This scholarship is offered to the Journalism major student who serves as editor of the LCCC student newspaper, The Outlook.

## Math

## LCCC MATH DEPARTMENT SCHOLARSHIP

Applicant must be enrolled in a program of studies leading to an A.S. Degree in Mathematics. Applicant must have 12 credits completed at time of application.

## Tech Prep

NORTHEASTERN PENNSYLVANIA TECH PREP ENDOWED SCHOLARSHIP Established in 2001 by the Northeastern PA Tech Prep Consortium. Awarded to a high school senior in the consortium who has completed a PDE approved Tech Prep program and plans to enroll in a similar program at one of the following: LCCC; Penn State Wilkes-Barre, Scranton or Hazleton; Lackawanna College; Keystone College; Johnson College, or a registered apprenticeship program. Applicant must have successfully completed all of the academic and technical requirements in their secondary Tech Prep curriculum and show proof of acceptance to a member post-secondary institution for the fall semester.

## III. FINANCIAL NEED

## JOSEPHINE CEFALO MEMORIAL SCHOLARSHIP

## G.P.A.

2.5 or higher

Established in 2001 by Atty. Michael Cefalo in memory of his beloved mother. He established this scholarship so that young people can rise up from humble beginnings to take their place in society, just as his parents did. Like the Cefalos, the recipient must strive to make the world a better place. Applicant must have unmet financial need and a strong desire to achieve their goals.

## CHOICE ONE FEDERAL CREDIT UNION SCHOLARSHIP

Established in 2002 by John Kebles, President of the credit union, to assist students who have unmet financial need. Applicant must be enrolled in a degree-bearing program at LCCC and have unmet financial need. Preference will be given to applicants who demonstrate community involvement.

## COCA-COLA SCHOLARSHIP

Established in 1999 by the Coca-Cola Corporation located in Pittston. Applicant must have unmet financial need and be in good academic standing.

## FORTINSKY FAMILY ENDOWED SCHOLARSHIP

Endowed in 2003 by Robert A. \& Shirley Fortinsky through the Fortinsky Charitable Foundations, Inc. Applicant must have unmet financial need and be in good academic standing.

## CURRY FAMILY SCHOLARSHIP

Established in 2001 by Francis \& Darryl Curry, to assist students who have unmet financial need.

## ALBERT FLORUSS MEMORIAL SCHOLARSHIP

Established in 2003 by Lisa and Frank Owens in memory of Mrs. Owen's father, Albert Floruss. Applicant must demonstrate strong community or college involvement in extra-curricular activities and have unmet financial need.

## ABIGAIL M. GEORGE MEMORIAL ENDOWED SCHOLARSHIP

Established by the LCCC Alumni Association in 1993 in memory of Abigail M. George, a dedicated volunteer and graduate of Luzerne County Community College. Applicant must be enrolled full-time and have earned at least 12 credits at the time of application, be involved in college or community activities and have unmet financial need.

## LCCC ASSOCIATION OF HIGHER EDUCATION SCHOLARSHIP

Funded by the LCCC Faculty Association. Applicant must demonstrate financial need and have completed at least 12 credits. Must be willing to be interviewed. Contact the Foundation office for deadlines and a separate application.

## LCCC FOUNDATION SCHOLARS AWARDS

Funded through the Foundation's annual fund raising activities. Applicant must be in good academic standing and have unmet financial need. Special consideration will be given to students with extenuating or personal circumstances.

## LCCC STUDENT AMBASSADOR CLUB SCHOLARSHIP

Established in 2007 by the Student Ambassador Club for a full-time student who demonstrates involvement in clubs and activities on campus. Applicant must have a 2.5 grade point average.
ALBERT P. NICHOLAS MEMORIAL ENDOWED SCHOLARSHIP
Established in 2003 by Sandra A. Nicholas, Executive Director LCCC Foundation, Inc., family and friends in memory of Mr. Albert P. Nicholas. Applicant must be enrolled in a degree-bearing program and have unmet financial need.

## RON POPKY MEMORIAL SCHOLARSHIP

Established in 2006 by friends and loved ones of Ron Popky. Applicant should be involved in extra-curricular activities and have financial need.

## PPL ENDOWED SCHOLARSHIP

Endowed in 2005 through donations received by PPL Electric Utilities. Applicant must be a resident of Luzerne County, be in good academic standing and have unmet financial need. Applicant should be active in community and/or college activities.

## PAUL J. RUSHIN MEMORIAL SCHOLARSHIP

Established in 2003 by Mary Jo Rushin, in memory of her husband Paul. Applicant must be a resident of Luzerne County and have unmet financial need.

## IV. RESIDENCY/LOCATION/HERITAGE

## JAMES A. BRENNAN MEMORIAL/KINGSTON ROTARY ENDOWMENT SCHOLARSHIP

Applicant must be a graduate of the Wyoming Valley West School District and demonstrate outstanding academic achievement and involvement in the community.

## COLLEGE MISERICORDIA SCHOLARSHIP

Applicant must be entering their senior year at LCCC and has committed to enrolling at College Misericordia following graduation.

## CRAHALL FAMILY ENDOWED SCHOLARSHIP

G.P.A.: $\quad 2.5$ or higher

Established in 2004 by the Crahall Family. For academic pursuits in the Business, Information Technology, Visual Communications or Fine Arts/Music curriculum. First priority will be to Native Americans. Applicants should demonstrate involvement in community activities. Employment status and extenuating personal circumstances will be given special consideration.

## FIRST FEDERAL BANK CHARITABLE FOUNDATION ENDOWED SCHOLARSHIP

This award was endowed in 2002 by the First Federal Bank Charitable Foundation to benefit an LCCC student residing in the Hazleton area enrolled in a degreebearing curriculum at Luzerne County Community College. First preference will be a student with unmet financial need.

## GETHA \& ISADORE EDELSTEIN SCHOLARSHIP

Established and endowed in 2003 through a trust donation from the Getha \& Isadore Edelstein estate. Applicant must be a graduate of the Greater Hazleton Area School District and be in good academic standing.

## JOHN LOMBARDO MEMORIAL SCHOLARSHIP

This scholarship was established in memory of the late John Lombardo by his friends and family. John was a Pittston Area volunteer fireman who perished in the line of duty. Preference will be given to a resident of the Greater Pittston Area enrolled in Engineering Technology, Emergency Medical Services Technology, Fire Safety Technology, Hotel and Restaurant Management and/or Science. Consideration is also given to volunteer activities, employment status or extenuating personal circumstances.

## LUZERNE NATIONAL BANK/JONATHAN STEINRUCK MEMORIAL SCHOLARSHIP

Established in 1998 by Luzerne National Bank in memory of Jonathan Steinruck, a West Side Area student. Applicant must be a graduate of the West Side Area School District and show academic potential and community involvement.

## PLAINS LIONS CLUB SCHOLARSHIP

Applicant must be a resident of Plains Borough and enrolled in at least 12 credits at LCCC. Preference will be given to a student with unmet financial need.

## RONNIE WITT ENDOWED SCHOLARSHIP

Established in 1998 by Ronnie Witt, former director of the College Bookstore, in honor of her $30^{\text {th }}$ year of employment at LCCC. Applicant must be a full-time student enrolled in at least 12 credits. Applicant must demonstrate academic potential and reside in Plains Borough.

## V. PART-TIME

## DR. RICHARD A. ALLEY SCHOLARSHIP

Established in 1996 by Dr. Richard A. Alley, LCCC Trustee. Applicant must demonstrate humanitarianism, academic achievement, and have unmet financial need. To be eligible, applicants must have earned 12-40 credits, be enrolled in at least six credits per semester and have a commitment to volunteerism.

## CHAMPION BUILDERS SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established in 1997 by Champion Builders, Kingston. Applicant must be employed
at least 20 hours per week, have at least nine credits earned at LCCC, and be enrolled in a minimum of six credits per semester.

## CROSS VALLEY FEDERAL CREDIT UNION/ JOAN OPLINGER SCHOLARSHIP

Established in 1996 by The Cross Valley Federal Credit Union. Applicant must have earned between 12 and 40 credits at LCCC, be enrolled in at least six credits per semester and have a commitment to volunteerism.

## LCCC ALUMNI ASSOCIATION SCHOLARSHIP

G.P.A. Required 2.5 or higher

This award is funded by the Alumni Phonathon and is primarily for part-time students. Applicant must have completed a minimum of 15 semester hours at LCCC, be enrolled in 6-11 credits in the semester(s) in which the scholarship is awarded, and demonstrate participation in community and / or campus activities. The application deadline is April 15 for award in the follow Fall / Spring academic year.

## VI. COMMUNITY/SCHOOL INVOLVEMENT/VOLUNTEERISM

## ANGELO J. CEFALO MEMORIAL SCHOLARSHIP

G.P.A.
2.5 or higher

Established in 2001 by Atty. Michael Cefalo in memory of his beloved father. The Cefalo family never forgot their roots in Northeastern Pennsylvania and dedicated their lives to helping others and trying to make the world a better place. Recipients are encouraged to do the same. Applicant must show community involvement and have unmet financial need.

## CROSS VALLEY FEDERAL CREDIT UNION / TED FRANCHELLA MEMORIAL SCHOLARSHIP

Established in 2002 by the members of the Cross Valley Federal Credit Union in memory of Ted Franchella, a valued co-worker and friend. Applicant must be involved in community activities.

## FIRST NATIONAL COMMUNITY BANK SCHOLARSHIP

Established by First National Community Bank in 2001. Applicant must demonstrate good character and community or college involvement in extracurricular activities.

## LCCC ADULT LEARNERS' ASSOCIATION SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established in 2002 by the Adult Learners' Association through various fundraising initiatives. Applicant must have unmet financial need and be active in community service or college activities.

## GEORGE McCUTCHEON SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established by the Student Government Association of Luzerne County Community College in recognition of George McCutcheon, former Director of Student Services, who dedicated sixteen years of service to students of the College. Applicant must have completed at least 30 semester hours at LCCC and be involved in college or community activities.

## STUDENT GOVERNMENT ASSOCIATION LEADERSHIP AWARD

## G.P.A. Required: 2.5 or higher

Applicant must have earned at least nine credits and have financial need and be involved in college and/or community activities.

## VII. SPECIAL CIRCUMSTANCES

## FRANK S. AGATI ENDOWMENT SCHOLARSHIP

G.P.A Required: 2.5 or higher

Established in 1967 by the Agati family, in memory of the late Frank S. Agati. This is the first endowed scholarship at Luzerne County Community College. Applicant must be a single parent with primary custodial and financial responsibility of his/her child(ren), and the head of household. Special consideration is given to those with extenuating personal circumstances; applicant must be enrolled in at least six credits per semester.

## PAUL H. LAUER, JR. SCHOLARSHIP

Established by the Cultural Heritage Council in memory of Paul H. Lauer Jr., to honor his unique artistic achievement and international community endeavors. Applicant must have at least 30 credits earned. Must be a Pennsylvania resident and demonstrate interest and achievement in at least one of the following areas: international folk art/design (enrollment in Commercial Art program); international / multi-cultural activities in the community and academic pursuit (enrollment in International Business Program); or study in another country (formal enrollment in a study abroad program).

## MILLER FAMILY SCHOLARSHIP

## G.P.A. Required 2.0 or higher

Established in 2000 by Murray and Elly Miller. First preference will be given to a student who has a diagnosed learning difference. Applicant must provide two letters of recommendation from a high school teacher and/or a guidance counselor.

## JULIA M. \& EDWARD NOVITSKI MEMORIAL SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established in 2000 by Lisa and Steve Novitski, this award is presented annually in memory of Julia M. Novitski. Applicant must be a single parent pursuing an Associates Degree at LCCC and participate in college or community activities. Preference will be given to students with unmet financial need.

## PATRICK J. SANTACROCE ENDOWED SCHOLARSHIP

Established in 2001 by friends, family and co-workers of the late Patrick J. Santacroce, former Dean of Community Services and Special Programs at LCCC. Applicant must have successfully completed 12 credits with at least six credits of developmental work courses at LCCC.

## THE LUZERNE FOUNDATION ENDOWED SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established in 2002 by the Board of Directors of The Luzerne Foundation. Applicant must be a resident of Luzerne County and have overcome extenuating personal circumstances. Applicant must be involved in community and/or college activities.

## ROSE ALLAN TUCKER SCHOLARSHIP

G.P.A. Required: 2.5 or higher

Established in 1998 by Rose Tucker, former LCCC Trustee and Luzerne County Commissioner. Applicant must be a single parent who has primary custodial and financial responsibility and is the head of household.

## 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 to determine their eligibility.

Chapter 35 first time dependents of Veterans should contact the VA Regional Office website at www.gibill.va.gov 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 www.gibill.va.gov 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 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, 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 www.gibill.va.gov.
6. 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) 3775222 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 pro grams
- Students 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 College has a Career Department staffed by career counselors who will assist prospective students, undecided students, those considering a program-of-study change, and community members considering a career change or desiring selfknowledge. Several career assessments are available to meet the needs of each individual.

Assessments which are widely used are the Strong Interest Inventory (SII), SelfDirected Search (SDS) and Discover.

The SII is a survey of self-reported interests and skills. Its major purpose is to help individuals understand how their interests and skills relate to the occupational world, thereby helping them make better career choices. It provides information about how their likes, dislikes, and skills resemble those of people already employed.

The Self-Directed Search (SDS) is a self-administered, self-scored, and self-interpreted vocational counseling tool. The SDS increases self-understanding, identifies career options, and helps individuals evaluate current vocational situations.

Discover is a computer-based, career guidance program which provides students the opportunity for extensive self-inventory in three areas - interests, abilities, and values. Students can also search for occupations based upon scores of interest inventories and aptitude tests, job characteristics, and major programs of study. A third
feature of the program allows students to ask questions about various occupations. Lastly, students can search for two-year, four-year, and graduate schools.

All career planning programs are free of charge. Appointments can be made by contacting the Career Services Office at (800) 377-5222 ext. 450.

## CAREER RESOURCE CENTER

Current information is necessary for students to make career or job decisions. Resources available in the center include employers' information, job search guides and techniques, self-assessment and career-planning books, vocational bibliographies, career information books and guides, transfer guides to four-year institutions, college catalogs, and cd's and video tapes on careers and job search strategies. The 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://depts.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
MEN
Baseball
Basketball
Cross Country
Golf
WOMEN
Basketball
Cross Country
Golf
Soccer
Softball
Volleyball

COLLEGE INTRAMURALS/(coed)
Flag Football
Basketball
Volleyball
Softball
Badminton
Bowling
Tennis
EXTRAMURALS
Bowling (coed)
Volleyball (coed)

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

## 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 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 \& 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.

## 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 Vice President of Student Development.

## 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 TwoYear 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) 3775222 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.

## EMERGENCY AND DISASTER RESPONSE PLAN

The College has adopted a Comprehensive Emergency Response Plan that provides recommended procedures to be followed during specific types of emergencies that could potentially result in personal injury, loss of life and loss of property. Since an emergency may be sudden and without warning, the procedures outlined in the plan are designed to be flexible in order to accommodate contingencies of various magnitudes. Specific types of emergencies addressed in the plan include fires, medical emergencies, chemical or radiation spills, bomb threats, weather emergencies, etc.

The College works closely and continuously with the Nanticoke Police and Fire Departments, the Luzerne County Emergency Management Agency and other public safety agencies to ensure the safety of the entire college community. The plan is reviewed by the Safety Committee and updated yearly or as needed. The College's Comprehensive Emergency Response Plan is provided to College staff and the Luzerne County Emergency Management and can also be viewed at www.luzerne.edu/security.

Due to the close proximity (within the 10 mile radius exposure pathway) of the PPL Susquehanna Steam Electric Station located in Salem Twp., it is vital that all College personnel and students are aware of the appropriate emergency procedures in the event of a nuclear accident. There are four stages of emergency classifications at a nuclear power plant. They are as follows:
(1) Unusual Event: A minor problem has occurred at the power plant; no release of radioactivity is expected.
(2) Alert: A minor problem has occurred that is not expected to affect power plant safety.
(3) Site Area Emergency: A more serious problem has occurred. It may affect major plant safety systems, but any release of radioactivity is not expected to exceed federal limits beyond power plant property
(4) General Emergency: A problem has occurred involving serious damage at the power plant and the release of radioactivity beyond the power plant property is expected.

The College and the surrounding area is protected by an early-warning siren system which is used for notification of nuclear emergencies, chemical spills, severe weather, etc. When you hear the siren, it is not necessarily a nuclear emergency.

- The siren system is tested monthly. The College is notified in advance.
- A steady tone, lasting three to five minutes, is used to alert the community to tune to the Emergency Warning System for further instructions. It is not an evacuation signal.
- Security maintains direct radio and phone contact with emergency officials.
- In the event of an incident, information will be displayed on video monitors.

Only the Governor of Pennsylvania can order and compel a mass evacuation of the population. If such an evacuation is ordered, notice of the order will be sent to the College by the Pennsylvania Emergency Management Agency.

## 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 | Compressed Class Time |
| :--- | :--- |
| 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.
or earlier
9:30 to 10:50
11:00 to 12:20
12:30 to 1:50
2:00 to 3:20
3:30 to $4: 50$
5:00 to 6:20

10:00 a.m. to 10:55 a.m.
11:05 to 12:00
12:10 p.m. to 1:05
1:15 to 2:10
2:20 to 3:15
3:25 to 4:20
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 2007-2008 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 168 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 183 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.S. DEGREE

Communications ................................................................................. 6 semester-hours
(ENG 101 \& ENG 102 or ENG 104 or ENG 261 or SPE)
Humanities or History Elective ......................................................... 3 semester-hours
Science .................................................................................................. 3 semester-hours
Mathematics (Mathematics or Computer) ....................................... 3 semester-hours
Social Science (other than history) .................................................... 3 semester-hours
Physical Education ............................................................................. 1 semester-hours
TOTAL 19 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-hours
TOTAL 19 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. In fact, the College's Student Curriculum Outcome \#6 states students will, "Utilize skills of self-assessment, self-direction and decision-making to achieve personal and professional goals."

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 S | 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 - |  |
| ${ }^{1}$ CIS 112 - Spreadsheet Analysis |  | or ECO 152 | 3 |
| with Microsoft Excel | 3 | ${ }^{2}$ BUS 107 - Math of Finance | 3 |
| * FYE 101 - First Year Experience | 1 |  |  |
|  | 15-16 |  | 15 |


|  | Second Year |  |  |  |
| :--- | ---: | :---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |  |
| ACC 211 - Intermediate Accounting I | 4 | ACC 212 - Intermediate Accounting II | 4 |  |
| ACC 214 - Tax Accounting | 3 | ACC 215 - Cost Accounting | 3 |  |
| Science Elective | 3 | Science Elective | 3 |  |
| 2 MAT 107 - Basic Statistics | 3 | 2 MAT 140 - Calculus for Business \& |  |  |
| Business Elective | 3 | the Social Science | 3 |  |
| Health \& Physical Education | $\underline{1}$ | Social Science Elective | $\underline{3}$ |  |
|  | 17 |  | Total Credits $63-64$ |  |

${ }^{1}$ Prerequisite CIS 110 - Introduction to Microcomputers with Microsoft Office or prior computer experience.
${ }^{2}$ 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.

[^1]
## 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 | 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 |  |
| * FYE 101 - First Year Experience | 1 | ENG 261 - Technical Communications | 3 |
| Science Elective |  | SPE 125 - Fundamentals of Speech | 3 |
| Business Elective - (Suggest BUS 201 - |  | Business Elective - (Suggest BUS 262 - |  |
| Principles of Marketing or BUS 261- |  | Business Law II or BUS 231 - Principles |  |
| Business Law 1 | 3 | of Management) |  |
| MAT 121 - College Algebra | $\underline{3}$ | BUS 107 - Math of Finance | 3 |
|  | $15-16$ |  | $\underline{3}$ |


|  | Second Year |  | Sem.-Hrs. |
| :--- | ---: | :---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | 3 |
| ECO 151 - Principles of Economics I | 3 | ECO 152-Principles of Economics II or |  |
| CIS 110 - Introduction to Microcomputers |  | Business Elective | 3 |
| with Microsoft Office | 3 | ACC 215-Cost Accounting | 3 |
| BUS 251 - Human Resource Mgt. | 3 | History Elective | 3 |
| MAT 140 - Calculus for Business \& |  | General Elective | 3 |
| the Social Science | 3 | Social Science Elective | $\underline{3}$ |
| Social Science Elective | 3 |  | 15 |

Health \& Physical Education

Students who do not have the required math background may be required to take MAT 105 as a prerequisite. MAT 121 and MAT 140 are still the required courses for this program.

[^2]
## COMPUTER INFORMATION SYSTEMS

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

The Computer Information Systems (CIS) curriculum provides students with the opportunity to complete many of the core courses normally required for the four-year professional degree. It is designed for students planning to transfer to a four-year degree program in Computer Information Systems Technology. It is primarily concerned with the foundation of the system development life cycle to business-oriented and computer-based information systems. The topics involve the study of systems analysis, systems design, database management, and computer programming, along with other technical and business study areas pertinent to the development and implementation of information systems in a variety of operational and administrative settings.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Year |  |  |
| :---: | :---: | :---: |
| First Semester Se | Sem.-Hrs. | Second Semester Sem.-Hrs. |
| CIS 110 - Introduction to Microcompute | ters | CIS 156 - Programming with JAVA 3 |
| with Microsoft Office | 3 | CIS 170 - Management Informantion Systems 3 |
| CIS 120 - PC Operating Systems | 3 | CIS 252 - Intermediate COBOL 3 |
| CIS 152 Structured Programming with with Cobol | 3 | MAT 140 - Calculus for Business and the Social Science |
| ENG 101 - English Composition | 3 | Science Elective 3 |
| * FYE 101- First Year Experience | 1 | SPE 125 - Fundamentals of Speech $\underline{3}$ |
| Health \& Physical Education | 1 | 18 |
| MAT 121 - College Algebra | 3 |  |16-17

## Second Year



## 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 Semester | Sem.-Hrs. | Second Semester <br> CIS 156 - Programming with JAVA <br> CIS 160 - Programming with | 3 |
| :--- | ---: | :--- | ---: |
| $\quad$ or CIS 260 - Advanced Visual Basic |  |  |  |$\quad$ Sem.-Hrs.

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition OR | 3 |
| EDU 150 - Introduction to Education | 3 | ENG 104 - Writing about Literature |  |
| PSY 103 - General Psychology | 3 | History Elective | 3 |
| Track Choice or EDU-151 | 3 | SOC 215 - Principles of Sociology | 3 |
| SPE 125 - Fundamentals of Speech | 3 | Track Choice or EDU-251 | 3 |
| Health \& Physical Education | 1 | PSY 210 - Educational Psychology | 3 |
| * FYE 101 - First Year Experience | $\underline{1}$ | Health \& Physical Education | $\underline{1}$ |
|  | $16-17$ |  | 16 |


| Third Semester | Sem.-Hrs. | Fourth Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| Humanities Elective | 3 | Track Choice or EDU-271 | 3 |
| PSY 204 - Child Psychology OR | 3 | Track Choice | 3 |
| PSY 217 - Developmental Psychology |  | CIS 110 - Introduction to Microcomputers | 3 |
| MAT 109 - Mathematics for |  | Mathematics Elective | 3 |
| Elementary Teachers I | 3 | Science Elective (BIO, CHE, PHY) | $\underline{3}$ |
| Science Elective (BIO, CHE, PHY) | 3 |  | 15 |
| Track Choice or EDU - 261 | $\underline{3}$ |  |  |



Second Semester
ENG 102 - Advanced Composition OR
ENG 104 - Writing about Literature SOC 215-Principles of Sociology 3
Track Choice or EDU-251 3
PSY 210 - Educational Psychology 3
Health \& Physical Education 1
16

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 fouryear institution he/she plans to attend upon completing LCCC's program.

[^3]
## Tracks

| Bloomsburg | College Misericordia | King's | Wilkes | Undecided |
| :---: | :---: | :---: | :---: | :---: |
| ENG-102 or <br> ENG-104 | ENG-104 | ENG-102 | ENG-102 or <br> ENG-104 | See Required Courses on Previous page |
| Biology <br> Elective | Lab Science <br> (2) | Science <br> (2) | BIO-121 (must have lab) |  |
| PHY-101 |  |  | PHY-102 or PHY-110 |  |
| MAT-101 or MAT-107 or MAT-140 or | MAT-107 | MAT-107 | MAT-110 | Students selecting a different institution should obtain the requirements for the institution they plan to attend and meet with their counselor/academic advisor to plan their first two years. |
| MAT-151 |  |  |  |  |
| English Lit. | ENG-223 | English Lit. | ENG-223 |  |
| HIS-201 |  |  | HIS-201 or HIS-202 |  |
| PSY-204 | PSY-217 | PSY-204 | PSY-217 |  |
| CIS-110 |  | CIS-110 | CIS-110 |  |
| CHD-100 | EDU-151 | MAT-110 | ART-110 |  |
| CHD-202 | EDU-251 | EDU-151 | PHI-150 |  |
| CHD-203 | EDU-261 | GEO-111 | EDU-151 |  |
| CHD-210 | EDU-271 | PHI-150 | PSY-213 |  |
| PHI-150 | CHD-100 | PHI-152 | EDU-271 |  |

# 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 4-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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | Science Elective (BIO or CHE) | 3 |
| PSY 103 - General Psychology | 3 | ENG 102 - Advanced Composition or |  |
| HPE 152 - Introduction to Physical |  | ENG 104 - Writing About Literature | 3 |
| $\quad$ Education \& Sport | 3 | HPE 154 - Safety \& First Aid | 3 |
| Mathematics Elective (Transfer Math) | 3 | HPE 151 - Program Planning for |  |
| HPE Electives | $1-3$ | Physical Education \& Sport | 3 |
| * FYE 101 - First Year Experience | $\underline{1}$ | EDU 150 - Introduction to Education | 3 |
|  | $15-16$ | HPE Electives | $1-3$ |
|  |  |  | 16 |


|  | Second Year |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |  |
| BIO 135 - Anatomy \& Physiology | 4 | Science Elective (BIO or CHE) | 4 |  |
| PSY 217 - Developmental Psychology | 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 | $\underline{1-3}$ | General Elective Transferable | $\underline{1-3}$ |  |

Total Credits 61-62

[^4]
## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition o |  |
| * 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 | 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| Humanities Elective | 3 | CIS 110 - Introduction to Microcomputers |  |
| 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 | 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.

[^5]
## Tracks

| Social Studies |  |  |
| :--- | :--- | :---: |
| HIS 201 | HIS 202 | SOC 216 |
| PHI 150 | ART 110 or MUS 150 |  |
|  |  |  |
| Science |  |  |
| MAT 121 | MAT 122 | BIO 121 |
| BIO 122 | CHE 151 | CHE 152 |
| PHY 131 | PHY 132 |  |

English
ENG 227 PHI 150
1 Group (6 credits) from
Group A ENG 221 ENG 222
Group B ENG 223 ENG 224
Group C ENG 225 ENG 226
3 Credits from
ENG 229 ENG 233 ENG 242

## Mathematics

MAT 151 MAT 251 MAT 252
MAT 275 PHI 150
1 Group (8 credits) from
Group A BIO 121 BIO 122
Group B CHE 151 CHE 152
Group C PHY 131 PHY 132

## 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 exerciserelated 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 | Sem.-Hrs. | Second Semester |  |
| ENG 101 - English Composition | 3 | Science Elective | Sem.-Hrs. |
| HPE 152 - Introduction to Physical |  | HPE 154 - Safety \& First Aid | 3 |
| Education \& Sport | 3 | HPE 151 - Program Planning for | 3 |
| PSY 103 - General Psychology | 3 | Physical Education \& Sports |  |
| Mathematics Elective (MAT 105 if |  | History Elective ( HIS 201 or 202 ) | 3 |
| taking CHE 151) | 3 | HPE Electives | 3 |
| HPE Electives | $1-3$ |  | $1-3$ |
| * FYE 101 - First Year Experience | 1 |  | 15 |
|  | $15-16$ |  |  |
|  |  | Second Year |  |
| First Semester | Sem.-Hrs. | Second Semester |  |
| 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 | $\underline{1-3}$ | SOC 215 -Principles of Sociology | $\underline{3}$ |
|  | 16 |  | 15 |

Total Credits 61-62

[^6]
## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| Science Elective | 3 or 4 | Science Elective | 3 or 4 |
| History Elective | 3 | ENG 102 - Advanced Composition OR |  |
| 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 | 1 | Health \& Physical Education Elective | 1 |
| *FYE 101 - First Year Experience | $\underline{1}$ | ${ }^{* *}$ Elective (See subjects below) | $\underline{3}$ |
|  | $15-16$ |  | 16 |


| Third Semester | Sem.-Hrs. |
| :--- | :--- | | Fourth Semester |
| :--- |
| An elective program based on the student's |
| educational and vocational interests. The |$\quad$| An elective program based on the student's |
| :--- |
| educational and vocational interests. The |

Total Credits 61-62

[^7]
## CURRICULUM GUIDES:

1. This is a highly flexible curriculum and any student entering the General Studies curriculum receives continuous guidance and counseling in order to more clearly define his/her educational goals.
2. Each student receives personal counseling before every semester to assist him/her in making a smooth and proper transfer to the four year institution, many of which have varying transfer and 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.

## 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 |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second 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 |
| Mathematics (See Math requirement) | 3 | Science Elective (continue sequence) | $3-4$ |
| Health \& Physical Education | 1 | History Elective | 3 |
| * FYE 101 - First Year Experience | $\underline{1}$ | Health \& Physical Education Elective | $\underline{1}$ |
|  | $16-17$ |  | 16 |


|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| Literature (or Humanities Elective) | 3 | Literature (or Humanities Elective) | 3 |
| Spanish or French (See language requirement) | 3 | Spanish or French (continue sequence) | 3 |
| Fine Arts Elective (Recommend ART 110 or |  | Social Science or History Elective | 3 |
| MUS 150) | 3 | Philosophy Elective | 3 |
| Social Science Elective | 3 | Humanities Elective | $\underline{3}$ |
| Elective** $^{*}$ | $\underline{3}$ |  | 15 |

Total Credits 62-63

* First-time students only.
*     * In Elective area, three semester hours must be taken from either the Social Science/ History, Science, Mathematics, Music Appreciation or Computer Information Systems areas.


## 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.
5. Mathematics requirement: Humanities students must complete MAT 101, MAT 105, or MAT 121 (or higher). Please note that some transfer curricula/programs require completion of MAT 121 or higher.
6. Science requirement: Humanities students should complete 6-8 credits (or two courses ) in science.

## 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 |  | Sem.-Hrs. |
| First Semester | Sem.-Hrs. | Second Semester | 3 |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition or | 3 |
| *YE 101 - First Year Experience | 1 | ENG 104 - Writing About Literature | 3 |
| History Elective | 3 | History Elective |  |
| Biology or Chemistry or Physics | 4 | Biology or Chemistry or Physics | 4 |
| Mathematics | $3-4-5$ | (continued sequence) | 4 |
| Health \& Physical Education | 1 | Mathematics (continued sequence) | 4 |
|  | $14-18$ | Health \& Physical Education | $\frac{1}{15}$ |

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

## 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 Semester
ENG 101 - English Composition

* FYE 101 - First Year Experience
BIO 121 - General Biology I
CHE 151 - General Chemistry I
MAT 121 - College Algebra
Social Science Elective
(recommend PSY 103)
Summer Session
CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II

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

## First Year

| First Year |  |  |
| :---: | :---: | :---: |
| Sem.-Hrs. | Second Semester Sem | Sem.-Hrs. |
| 3 | ENG 102 - Advanced Composition | 3 |
| 1 | CHE 152 - General Chemistry II | 4 |
| 4 | BIO 122 - General Biology II | 4 |
| 4 | BUS 248 - Small Business Management | t 3 |
| 3 | Health \& Physical Education | 1 |
| $\underline{3}$ |  | 15 |
| 17-18 |  |  |
| Sem.-Hrs. |  |  |
| 4 |  |  |
| $\underline{4}$ |  |  |
| 8 |  |  |
| Second Year |  |  |
| Sem.-Hrs. | Second Semester Sem | Sem.-Hrs. |
| 3 | PHY 132 - General Physics II | 4 |
| 4 | BIO 251 - General Microbiology | 4 |
| 4 | BIO 136 - Anatomy and Physiology II | 4 |
| 3 | CIS 110 - Introduction to Microcomputers | ters 3 |
| 3 | with Microsoft Office |  |
| 1 | SPE 125 - Fundamentals of Speech | 3 |
| 18 |  | 18 |18

[^8]
## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition or | 3 |
| * FYE 101 - First Year Experience | 1 | ENG 261 - Technical Communications |  |
| 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 | $\underline{3}$ | CIS 110 - Introduction to Microcomputers | 3 |
|  | $16-17$ | with Microsoft Office | 3 |
|  |  | Health \& Physical Education | $\frac{1}{17}$ |


|  | Second Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| BUS 261 - Business Law I | 3 | Elective (Recommends PHI 152 or SPE 210.) | 3 |
| CHE 151 - General Chemistry I or | 4 | HPE 154 - Safety and First Aid | 2 |
| CHE 175 - Chemistry for Health Science |  | BUS 262 - Business Law II | 3 |
| BUS 248 - Small Business Management | 3 | BIO 251 - General Microbiology | 4 |
| BIO 102 - Human Genetics and Ecology | 3 | Mathematics Elective | $-4-4$ |
| History Elective | $\underline{3}$ |  | $15-16$ |

Total Credits 64-65

[^9]
## 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
ENG 101 - English Composition

* FYE 101-First Year Experience
BIO 121 - General Biology I
CHE 151 - General Chemistry I
MAT 125 - College Algebra \&
Trigonometry


## Summer Session

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

| 3 |
| ---: |
| 1 |
| 4 |
| 4 |
|  |
| 5 |
| $16-17$ |
|  |
| Sem.-Hrs. |
| 4 |
| 4 |


| 3 |
| ---: |
| 1 |
| 4 |
| 4 |
|  |
| 5 |
| $16-17$ |
|  |
| Sem.-Hrs. |
| 4 |
| 4 |

Sem.-Hrs. Second Semester Sem.-Hrs.
ENG 101 - English Composition
FYE 101 Frst Year Experience
CHE 151 - General Chemistry I
MAT 125 - College Algebra \& Trigonometry

8

|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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** |  |
| Health \& Physical Education | $\frac{1}{14}$ |  | $3-4$ |
|  |  |  | $14-15$ |

Total Credits 68-69

[^10]
## 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 |  | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | 3 |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition | 4 |
| * FYE 101 - First Year experience | 1 | BIO 122 - General Biology II | 4 |
| BIO 121 - General Biology I | 4 | CHE 152 - General Chemistry II |  |
| CHE 151 - General Chemistry I | 4 | MAT 107 - Basic Statistics OR |  |
| MAT 151 - Analytical Geometry \& Calculus | 4 | MAT 251 - Analytic Geometry \& Calculus II $3 / 4$ |  |
| Health \& Physical Education | $\underline{1}$ | SPE 125 - Fundamentals of Speech | $\frac{3}{17-18}$ |


|  | Second Year |  |  |
| :--- | ---: | :---: | ---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| HIS 201 - American History to 1865 | 3 | HIS 202 - American History Since 1865 | 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 | $\underline{3}$ | Health \& Physical Education | $\underline{1}$ |
|  | 17 |  | 15 |

Total Credits 65-66

[^11]
## 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<br>BIO 121 - General Biology I<br>CHE 151 - General Chemistry I<br>ENG 101 - English Composition<br>MAT 151 - Calculus I<br>* FYE 101 - First Year Experience

Third Semester
BIO 222 - Botany OR
CHE 251 - Organic Chemistry I OR
PHY 131 - General Physics I or higher
ENG 102 - Advanced Composition OR
ENG 104 - Writing About Literature
Sem.-Hrs. Fourth Semester
Sem.-Hrs.
Sem.-Hrs. Second Semester
Sem.-Hrs.
BIO 122 - General Biology II
CHE 152 - General Chemistry II 4
SPE 125 - Fundamentals of Speech 3
MAT 251 - Calculus II $\underline{4}$

Social Science Elective 3
Health \& Physical Education $\quad 1 \frac{1}{15}$

BIO 251 - General Microbiology OR
CHE 252 - Organic Chemistry II OR
PHY 132 - General Physics II or higher 8
History Elective 3
Social Science Elective 3
Health \& Physical Education $\quad \frac{1}{15}$

Total Credits 60-61

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:

1. 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

[^12]
## 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
ENG 101-English Composition

* FYE 101 - First Year Experience
History 101/201
PSY 103-General Psychology
Science Elective
Elective (see note below)
Health \& Physical Education
First Semester
Humanities Elective
Mathematics Elective
***POS 101 - American Government
ECO 151 - Principles of Economics I
Elective

| Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ---: | :--- | ---: |
| 3 | ENG 102 - Advanced Composition or |  |
| 1 | ENG 104 Writing for Literature | 3 |
| 3 | History Elective | 3 |
| 3 | SOC 215 - Principles of Sociology | 3 |
| $3-4$ | Science Elective |  |
| 3 | (continued sequence) | $3-4$ |
| $\frac{1}{16-18}$ | Elective (see note below) | 3 |
|  | Health \& Physical Education | $\frac{1}{16-17}$ |

Sem.-Hrs. Second Semester Sem.-Hrs.
3 Humanities Elective 3
3 SPE 125 - Fundamentals of Speech 3
$\begin{array}{llll}* P O S \\ 101 & \text { American Government } & 3 & \text { Social Science Electives }\end{array}$
Elective $\quad \underline{3} \quad \frac{3}{15}$
15
Total Credits 62-65
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.
[^13]
## 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
Cyber Security Management
Dental Business Assisting
Dental Hygiene
Early Childhood Education
Electrical Construction Technology
Electronics Engineering Technology
Electronics/Robotics Study
Concentration (Dual Track)

Emergency Medical Services
Fire Science Technology
Food Production Management
Horticulture Technology
Hotel and Restaurant Management
Human Services
Integrated Entertainment Technology
Interior Design
Journalism Communications
Kitchen and Bath Design
Legal Assisting (Paralegal)
Medical Office
Assistant/Transcriptionist
Medical Office
Assistant/ Insurance Specialist
Motorsports Technology
Music Recording Technology
Nanofabrication Manufacturing
Technology
Nuclear Engineering Technology
Nursing
Office Management and
Microcomputer Application
Specialist
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 168 FOR LISTING OF CURRICULA LEADING TO A CERTIFICATE OF SPECIALIZATION 

## C. SEE PAGE 183 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



|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs | Second Semester | Sem.-Hrs. |
| BUS 261 - Business Law I | 3 | ACC 213 - Managerial Accounting | 3 |
| ACC 211 - Intermediate Accounting I | 4 | BUS 262 - Business Law II | 3 |
| ACC 214 - Tax Accounting | 3 | ACC 212 - Intermediate Accounting II | 4 |
| Science Elective | 3 | Business Elective | 3 |
| ACC 121 - Applications in |  | Humanities or History Elective | $\underline{3}$ |
| Microcomputing Accounting | $\underline{3}$ |  | 16 |

[^14]
## 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


Total Credits 63-64

[^15]
## 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 | Sem.-Hrs. | Second Semester <br> PHY 121 - Technical Physics or | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ASR 101 - Introduction to Automated |  | PHY 123 - Technical Physics I | 4 |
| Systems / Robotics | 5 | MAT 112 - Technical Mathematics II | 5 |
| MAT 111 - Technical Mathematics I | 3 | EET 120 - Electrical Theory | 4 |
| GET 113 - Technical Drafting | 3 | GET 122 - Mfg. Processes II | 3 |
| GET 121 - Manufact. Processes I | 3 | Health \& Physical Education | $\underline{1}$ |
| ENG 101 - English Composition | $\underline{1}$ |  | 17 |
| * FYE 101 - First Year Experience | $17-18$ |  |  |


|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 I | 3 | AMT 104 - CNC Machining II | 4 |
| ENG 261 - Technical Communications | 3 | GET 112 - Industrial Safety | 1 |
| EET 135 - Electronic Devices | $\underline{4}$ | Social Science Elective |  |
|  | 17 | (other than History) | 3 |
|  |  | SPE 125 - Fund. of Speech | 3 |

[^16]
## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| 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 Repair | 3 | AUT 130 - Manual Transmissions 4WD | 3 |
| AUT 106 - Steering \& Suspension Systems | 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 | $\mathbf{1}$ | Health \& Physical Ed Elective | $\underline{1}$ |
|  | $\mathbf{1 6}$ |  | 16 |


| Second Year |  |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |  |
| AUT 108 - Trans \& Drive Basic (RWD) | 3 | AUT 110 - Heating \& Air Cond Theroy | 3 |  |
| AUT 109 - Power Plant Overhaul Theory | 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 | $\underline{3}$ | BUS 253 - First Line Supervision | $\underline{3}$ |  |
|  | 18 |  | 18 |  |

* 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


Total Credits 62-63

[^17]
## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| 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 | $\underline{1}$ | Health \& Physical Education Elective | $\underline{1}$ |
|  | $16-17$ |  | 16 |


|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 | 3 |
| CIS-110 - Introduction to Microcomputers | $\underline{3}$ | Social Science Elective | $\frac{3}{15}$ |

Total Credits 62-63

[^18]NOTE : See page 223-224 for course fee information

## 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 | Sem.-Hrs. | Second Semester S | Sem.-Hrs. |
| 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 Mass Communications | 3 | POS 101 - American Government (recommended) | 3 |
| JOR 101 - Basic Newswriting | 4 | COM 102 - Electronic Field Production | n 4 |
| Health \& Physical Education | 1 | COM 105 - Writing for Media | 3 |
|  | 18-19 | CIS 107 - Computers for Mass Media | 3 |
|  |  |  | 19 |
| Second Year |  |  |  |
| First Semester | Sem.-Hrs. | Second Semester S | Sem.-Hrs. |
| COM 104 - Preparation and Use |  | Humanities or History Elective | 3 |
| of Multi-Media/Internet | 3 | COM 214 - Desktop Video \& Graphics | s 3 |
| Science Elective (recommend PHY - 101) |  | COM 207 - Professional Internship or |  |
| PHY 101 - Intro./ Physical Science I |  | COM 209 - Special Projects Workshop | 6 |
| (recommended) | 3 | COM Elective | 3 |
| COM 201 - Radio Production | 4 |  | 15 |
| COM 202 - Electronic News Gathering | g 3 |  |  |
| COM 204 - Mass Media Management |  |  |  |
| and Law | 3 |  |  |
| 16 |  |  |  |
| * First-time students only. |  | Total Cred | redits 68-69 |

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| MAT 103 - Applied Mathematics for |  | ENG 101 - English Composition | 3 |
| $\quad$ 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 | 4 | PLH 114 - Advanced Plumbing Systems | 4 |
| PLH 128 - PLH Code or |  | Social Science Elective | 3 |
| ARC 114 - Bldg. Materials \& |  | Health \& Physical Education | $\frac{1}{18}$ |
| Construction | 3 |  | 18 |

$\begin{array}{ll}\text { PLH } 112 \text { - Basic Plumbing Systems } & 4 \\ \text { CEL } 103 \text { - Basic Construction Wiring } & \underline{3}\end{array}$

$$
17-18
$$

## Second Year



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 |  | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester |  |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition or | 3 |
| BUS 101 - Introduction to Business | 3 | SPE 125 - Fundamentals of Speech |  |
| Business Elective | 3 | BUS 107 - Mathematics of Finance or | 3 |
| Mathematics Elective | 3 | Business Elective | 3 |
| CIS 110 - Introduction to Microcomputers |  | BUS 201 - Principles of Marketing I | 3 |
| $\quad$ with Microsoft Office | 3 | BUS 263 - Office Management | 3 |
| * FYE 101 - First Year Experience | 1 | Social Science Elective |  |
| Health \& Physical Education | $\underline{1}$ | (other than History) |  |
|  | $16-17$ |  | 3 |


|  | Second Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 or |  |
| Humanities or History Elective | 3 | ENG 261 - Technical Communications | 3 |
| Science Elective | $\underline{3}$ | BUS 251 - Human Resource Management | 3 |
|  | 15 | Business Elective | $\underline{3}$ |

Total Credits 61-62

[^19]
## 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


[^20]
## 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 | Sem.-Hrs. | Second Semester Sem | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| 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 - Computer 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 or | 3 |
| ART 110 - Art Appreciation | 3 | SPE 125 - Fundamentals of Speech |  |
| Health \& Physical Education | 1 | JOR 202 - Advertising | 3 |
|  | 16-17 |  | 18 |
| Second Year |  |  |  |
| First Semester | Sem.-Hrs. | Second Semester Sem | Sem.-Hrs. |
| 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 | 3 |
| CAR 277 - Photo Image Enhancement | t 3 | Science Elective |  |
| Social Science Elective | 3 | CAR 283 - Advanced Publication Design | ign $\underline{3}$ |
|  | 18 |  | 15 |

Total Credits 67-68

* First-time students only.
** 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.

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

## 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
CAR 119 - Drawing I
CAR 129 - Color and Design I
CAR 243 - Material and Techniques
ENG 101 - English Composition

* FYE 101 - First Year Experience
ART 110 - Art Appreciation

Sem.-Hrs. Second Semester
Sem.-Hrs.
CAR 119 - Drawing I
3 CAR 131 - Sculpture I
3

CAR 243 - Material and Techniques
3 CAR 120 - Drawing II
3

ENG 101 - English Composition
3 CAR 220 - Basic Photography 3

* FYE 101 - First Year Experience

3 ENG 102 - Advanced Composition or

ART 110 - Art Appreciation
1 SPE 125 - Fundamentals of Speech
3 BIO 120 - Anatomy for Artists 3
15-16 Health \& Physical Education $\quad 1$
16
First Semester
CAR 233 - Illustration I
CAR 132 - Life Drawing I
JOR 202 - Advertising
CAR 258 - Landscape Painting
CIS 106 - Computer in Industry
Social Science Elective
(other than History)

Second Year
Sem.-Hrs. Second Semester Sem.-Hrs.
3 CAR 239 - Portrait Painting 3
3 CAR 234 - Illustration II 3
3 CAR 133 - Life Drawing II 3
3 CAR 218 - Professional Painting Port. 1
3 CAR 256-Still Life Painting 3
** Art Related Elective - 3
3
18
Total Credits 65-66

* First-time students only.
** 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.

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

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 | $\underline{3}$ | Health \& Physical Education | $\frac{1}{16}$ |



Total Credits 67-68

* First-time students only.
** 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.

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.

## 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

| REQUIRED COURSES / RECOMMENDED SEQUENCE |  |  |  |
| :--- | ---: | :--- | ---: |
|  | First Year |  |  |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| CIS 106 - Computer 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 Enhancement | 3 |
| CAR 245 - Typography | 3 | CAR 241 - Graphic Design I | 3 |
| ENG 101 - English Composition | 3 | ENG 102 - Advanced Composition or | 3 |
| * FYE 101 - First Year Experience | 1 | SPE 125 - Fundamentals of Speech |  |
| CAR 220 - Basic Photography | $\underline{3}$ | Social Science Elective | $\underline{3}$ |

18-19 18

|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| CAR 278 - Painting with the Computer | 3 | CAR 283 - Advanced Publication Design or | 3 |
| CAR 293 - Web Page Design | 3 | Computer Graphics Elective |  |
| ART 110 - Art Appreciation | 3 | CAR 291 - Computer Animation | 3 |
| BIO 120 - Anatomy for Artists | 3 | CAR 294 - Advanced Web Presentation | 3 |
| JOR 202 - Advertising | 3 | CAR 279 - Presentation and Portfolio | 3 |
| Health \& Physical Education | $\underline{1}$ | ${ }^{* *}$ CAR 281 - Internship or Art Elective | $\underline{3}$ |
|  | 16 |  | Total Credits 67-68 |

* First-time students only.
** 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.

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

## 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
ENG 101 - English Composition

* FYE 101 - First Year Experience

MAT 111 - Technical Mathematics I
GET 113 - Technical Drafting
GET 121 - Manufacturing Proc. I
Health \& Physical Education

| First Year |  |  |  |  |
| ---: | :--- | ---: | :---: | :---: |
| Sem.-Hrs. | Second Semester | Sem.-Hrs. |  |  |
| 3 | ENG 102 - Advanced Composition or |  |  |  |
| 1 | ENG 261 - Technical Communications | 3 |  |  |
| 5 | GET 118 - Descriptive Geometry | 2 |  |  |
| 3 | GET 122 - Manufacturing Proc. II | 3 |  |  |
| 3 | PHY 121 - Technical Physics | 4 |  |  |
| $15-1$ | CAD 101 - Comp. Assist. Design I | $\frac{3}{15}$ |  |  |

## Second Year

First Semester
AMT 103-CNC Machining I
GET 123-Technical Mechanics
CDT 203 - Computerized
Advanced Drafting
CAD 102 - Comp. Assis. Design II
Technology Elective

Sem.-Hrs. Second Semester Sem.-Hrs
Sem.-Hrs.

CDT 201 - Materials and Testing
CDT 204 - Computerized Design Problems5

Social Science Elective
(other than History) ..... 3
Humanities or History Elective ..... 3
Elective ..... 3

## 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 |

[^21]
## COMPUTER INFORMATION SYSTEMS

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

The Computer Information Systems (CIS) curriculum is concerned with the foundation of the system development life cycle to business-oriented and computer-based information systems. The topics involve the study of systems analysis, systems design, database management, and computer programming, along with other technical and business study areas pertinent to the development and implementation of information systems in a variety of operational and administrative settings.

This curriculum is designed to prepare the student for entry-level positions in the field of computer information systems/applications programming. The student will acquire a comprehensive understanding of the theory and skills necessary to work in any of several areas of computer information.

The student may choose the RPG sequence (CIS 150-CIS 250) or the COBOL sequence (CIS 152-CIS 252). A waiver for previous experience must be obtained from the CIS coordinator).

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Year



Total Credits 64-66

* May test out as a result of Placement Testing.
* 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| 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 Systems | 3 |
| Health / Physical Ed Electives or CPR | $1-2$ | MAT 112 - Technical Mathematics II | $\underline{5}$ |
| * FYE 101 - First Year Experience | $\underline{1}$ |  | 15 |


| Second Year |  |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| CST 227 - Linux/Unix Operating System | 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 |  | CST 230 - TCP/IP and Network Routers | 3 |
| or SPE 125 - Fundamentals of Speech | 3 | Social Science Elective | $\underline{3}$ |
| GET 234 - Intro to Computer Programming | $\underline{3}$ |  | 15 |

[^22]
## 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.

## REQUIRED COURSES / RECOMMENDED SEQUENCE



Total Credits 82-83

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.
*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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 | 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 Justice | 3 |
| Health \& Physical Education | $\underline{1}$ | Mathematics Elective | $\frac{3}{18}$ |


|  | Second Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| POS 101 - American Government | 3 | PSY/SOC Elective | 3 |
| PSY 103 - General Psychology | 3 | Humanities or History Elective | 3 |
| CJU 242 - Police Community Relations | 3 | CJU Elective | 3 |
| CJU Elective | 3 | CJU Elective | 3 |
| CJU Elective | $\underline{3}$ | Science Elective | $\underline{3}$ |
|  | 15 |  | 15 |
|  |  |  | Total Credits 64-65 |

## 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
CJU 259 - Victimology
CJU 260 - Introduction to Security

* 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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/ |  |
| * FYE 101 - First Year Experience | $\underline{1}$ | Mulitmedia Systems | $\underline{3}$ |
|  | $17-18$ |  | 16 |


| Second Year |  |  |  |
| :--- | :--- | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| CIS 170 - Management Information Systems 3 | PHY 121 - Tech Physics | 4 |  |
| or CST 227 - Linux Operating Systems |  | CST 215-Data Communications | 3 |
| History Elective | 3 | CST 232 - Computer Forensics (Windows) | 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 Communications | 3 | Health \& Physical Education | -1 |
| ACC 111 - Principles of Accounting | $\underline{3}$ |  | 16 |

Total Credits 67-68

[^23]
## DENTAL BUSINESS ASSISTING

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

The mission of the dental business assisting 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 business assisting.

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 $\underline{4}$
7

| First Year |  |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| DAS 101 - Chairside Dental Assisting 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 | 2 |
| DAS 104 - Dental Specialties | 3 | DAS 114 - Dental Assisting |  |
| FYE 101 - First Year Experience | $\underline{1}$ | Clinical Practice | $\frac{7}{15}$ |


|  | Second Year |  | Sem.-Hrs. | Second Semester |
| :--- | ---: | :---: | ---: | ---: |
| First Semester | 3 | OMT 236 - Medical Office Procedures II | 3 |  |
| OMT 233 - Medical Office Procedures I | 3 | OMT or CIS Elective | 3 |  |
| OMT 125 - Beginning Typewriting | 3 | OMT or CIS Elective | 3 |  |
| OMT or CIS Elective |  | CIS 110 Introduction to Microcomputers |  |  |
| SPE 210 - Intro. to Interpersonal |  | with Microsoft Office | 3 |  |
| Communication or | 3 | SOC 215 Principles of Sociology | $\underline{3}$ |  |
| SPE 125 - Fundamentals of Speech | 3 |  | 15 |  |

EMS 207 - Cardio-Pulmonary
Resuscitation or HPE Elective $\quad 1$
16

[^24]
## 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 (see ADMISSION TO THE HEALTH SCIENCE PROGRAMS).

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## Summer Session

| Summer I | Sem.-Hrs. |
| :--- | ---: |
| BIO 135 - Anatomy \& Physiology I | 4 |
| ENG 101 - English Composition | 3 |
| EMS 207 - Cardio-Pulmonary |  |
| $\quad$ Resuscitation (CPR) or HPE Elective | -1 |


|  | First Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 \& Embryology | 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 | $-\frac{2}{2}$ |
| * FYE 101 - First Year Experience | $\underline{1}$ |  | $17-18$ |

## Summer Session

| Summer I | Sem.-Hrs. | Summer II |
| :--- | ---: | :---: |
| DHY 205- Oral Pathology | 3 | DHY 122-Advanced Dental Hygiene |
|  | Procedures | 2 |


| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | :--- |
| PSY 103 - General Psychology | 3 | SPE 210 - Introduction to Interpersonal |  |
| DHY 201 - Dental Hygiene Seminar III | 2 | Communication or |  |
| DHY 202 - Dental Hygiene Clinic III | 4 | SPE 125 - Fundamentals of Speech | 3 |
| DHY 203 - Dental Health Education | 2 | SOC 215 - Principles of Sociology | 3 |
| DHY 204 - Dental Pharmacology | 3 | DHY 211 - Dental Hygiene Seminar IV | 2 |
| DHY 206 - Periodontic II | $\underline{2}$ | DHY 212 - Dental Hygiene Clinic IV | 4 |
|  | 16 | DHY 213 - Community Dental Health | 2 |
|  |  | ${ }^{* *}$ DHY 220 - Dental Hygiene Practicum | $\frac{2}{16}$ |

* First-time students only.
** By Permission of Department


## EARLY CHILDHOOD EDUCATION

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

The A.A.S. Degree in Early Childhood Education is designed for those students who are interested in entering the workforce upon graduation. Trained as assistants or teachers, psychologists, and other professionals in schools, institutions, agencies, and organizations concerned with young children, graduates have a choice of career opportunities in day care centers, pre-schools, kindergartens, and primary grades. The course of study includes technical and general education courses as well as observation and practice in field work with young children. 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 CHD 220-221 Field Work in Child Development. CHD 100 Introduction to Early Childhood Education is a prerequisite for all early childhood education courses except CHD 101 Infants /Toddlers. CHD ECR is completed concurrently with CHD 100.

REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Year

| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | ART 110 - Art Appreciation or |  |
| CHD 100 - Intro to Early Childhood Ed | 3 | MUS 150 - Music Appreciation | 3 |
| CHD 101 - Infants and Toddlers | 3 | CHD 208/PSY204 - Child Psychology | 3 |
| CHDECR - Early Childhood Regulations | 0 | CHD 207 - Young Children in Society | 3 |
| PSY 103 - General Psychology | 3 | CHD - Elective | 3 |
| CIS 110 - Intro to Micro Computer (or higher) | 3 | MAT - Elective | 3 |
| * FYE 101 - First Year Experience | $\frac{1}{2}$ | Health \& Physical Education Elective | $\frac{2}{17}$ |


| Second Year |  |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| CHD 205 - Health Safety and Nutrition | 3 | CHD 210 - Children with Disabilities | 3 |
| CHD - Elective | 3 | CHD 221 - Field Work II | 3 |
| CHD 220 - Field Work I | 3 | CHD 216 - Early Childhood Program |  |
| ENG 102 - Advanced Composition or |  | Management | 3 |
| SPE 125 - Fundamentals of Speech or |  | CHD - Elective | 3 |
| SPE 210 - Intro to Interpersonal |  | PSY 210 - Educational Psychology | $-\frac{3}{15}$ |
| Communication | 3 |  |  |
| SOC 217 - The Family | 3 |  | Total Credits 64-65 |
| Science Elective | $\underline{3}$ |  |  |

## 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 |  | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | 3 |
| ENG 101 - English Composition | 3 | ENG 261 - Technical Communications |  |
| * FYE 101 - First Year Experience | 1 | Social Science Elective | 3 |
| MAT 103 - Applied Mathematics for Industry |  | (other than History) | 4 |
| (Trade) | 3 | CEL 112 - Advanced Electrical Const. | 3 |
| CEL 101 - D.C. \& A.C. Fundamentals | 4 | BUS 248 - Small Business Management | 3 |
| CEL 103 - Basic Construction Wiring | 3 | CEL 116 - National Electric Code I | -2 |
| GET 109 - Blueprint Reading \& Est. | $\underline{3}$ |  | 15 |


| Second Year |  |  |
| ---: | :---: | ---: |
| Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 3 | CEL 122 - Electric Motor Control II | 4 |
| 3 | CEL 132 - Transformers | 3 |
| 4 | PLH 105 - Controls for Heating | 4 |
| 3 | CEL 123 - National Electrical Code III | 2 |
| 2 | Humanities or History Elective | $\underline{3}$ |
| 1 |  | 16 |

Total Credits 63-64

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

[^25]
## 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 entrylevel 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 139) 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



[^26]
# 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: <br> Course Title Sem.-Hr.

ASR 101 - Introduction to
Automated Systems/Robotics 3
ASR 203 - Programmable Logic Controllers 3
ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications $\underline{12}$
Total 12

## 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

* EMS 101 - Basic EMT Course Sem.-H
* EMS 207-CPR or Health \& Physical Education Elective
ENG 101 - English Composition
PSY 103 - General Psychology
**FYE 101 - First Year Experience


## Second Semester

6 EMS 204 - EMS Management 3
Sem.-Hrs. ENG 261 - Technical Communications 3 CIS 110 - Introduction to Microcomputers 3 SPE 125 - Fundamentals of Speech $\quad \frac{3}{12}$ $\frac{3}{12}$
3
1

Second Year

## First Semester

* EMS 201 - Paramedic (Part A)

Sem.-Hrs. Second Semester Sem.-Hrs.
EMS 103 - Basic Pharmacology

* EMS 208 - Water Rescue 1 * EMS 202 - Paramedic (Part B) 7
* EMS 209 - Emergency Vehicle Operations $1 \quad$ * EMS 210 - Basic Trauma Life Support 1

BIO 125 - Basic Anatomy \& Physiology $\quad 4 \quad *$ EMS 211 - Advanced Cardiac Life Support 1
13 12

## Summer Session Sem.-Hrs.

* EMS 203 - Paramedic (Part C) 7
* EMS 212 - Pediatric Advanced Life Support 1
* EMS 205 - Advanced Practice 5

13
Total Credits 63-64

[^27]Note: EMS 206 - Scuba may be used to fulfill the Health \& Physical Education Requirement.

## 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 |  |  |  |
| :---: | :---: | :---: | :---: |
| 2-Year Program |  |  |  |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| FST 101 - Introduction to Fire Protectio and Prevention | , | FST 112 - Fire Protection Systems FST 202 - Hazardous Materials | 3 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 Industry | 3 |  | 15 |
| PHY 101 - Introduction to Physical |  |  |  |
| Science | 3 |  |  |
| EMS 207 - C.P.R. | 1 |  |  |
| 16-17 |  |  |  |
| Summer Semester | Sem.-Hrs. |  |  |
| FST 121 - Tactics and Strategy | 3 |  |  |
|  | 3 |  |  |


| Third Semester Sem | Sem.-Hrs. | Fourth Semester | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| FST 201 - Building Codes \& Construction | 3 | FST 203 - Principles of Inspection | 3 |
| FST 251 - Fire Investigation \& Arson | 3 | FST 255 - Fire Service Hydraulics | 3 |
| CIS 110 - Introduction to Microcomputers with Microsoft Office | 3 | SOC 215 - Principles of Sociology | $\frac{3}{9}$ |
| Social Science Elective | 3 |  |  |
| ENG 261 - Technical Communications | $\stackrel{3}{15}$ |  |  |


| Summer Semester | Sem.-Hrs. |
| :---: | ---: |
| FST 259 - Hydraulics | $\underline{3}$ |

* 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..


## 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

[^28]
## FOOD PRODUCTION MANAGEMENT

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

The Food Production Management Program is designed to help meet the growing demand for well-trained personnel in the high-volume food service industry.

The course materials place emphasis on the responsibilities of the food service manager including: nutritional values, food preparation and knowledge and training of maintenance procedures for sanitary conditions within the food production facility.

The program includes academic classroom study and practical hands-on laboratory work. The methodologies of cooking and sanitation are stressed.

Food services management jobs are available in high-volume restaurants, institutions (colleges, schools, in-plant feeding, office complexes, correctional facilities, hospitals) country clubs and central commissionary kitchens.

Assistance is provided to students for apprenticeship training, part-time jobs and fulltime positions during and after completion of the Food Production Program.

A limited number of scholarships are available from the industry annually. An existing and continuing opportunity for internship with Disney World, Orlando, Fla. and a working relationship with Seafarers International Union.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Year

First Semester
ENG 101 - English Composition

* FYE 101 - First Year Experience

MAT 103 - Applied Mathematics for Industry
CUL 104 - Fruit and Vegetable Selection/ Production
CUL 108 - Food Sanitation and Safety 3
CUL 105 - Soup and Sauce Analysis/ Production

1

3

Sem.-Hrs. Second Semester Sem.-Hrs.
3 ENG 261 - Technical Communications or

SPE 125 - Fundamentals of Speech
HRM 122 - Food Purchasing 3
CUL 102 - Pantry and Cold Food
3 Production 4 CUL 106 - Baking Techniques and Analysis 3 CIS 104 - Hospitality Computer Applications 3 Health \& Physical Education 1 HRM 260 - H\&R Work Experience Practicum $\underline{17}$


Total Credits 69-70
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.

[^29]
## 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 a career area track: General Horticulture, Landscape Design and Construction and Floral Design/Interior Landscape. 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 production, landscape construction, floral design, industry/ government horticulturists, and horticulture equipment/chemical sales.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year

| First Semester S | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| * FYE 101 - First Year Experience | 1 | ENG 101 - English Composition | 3 |
| HRT 101 - Fundamentals of Horticultu | ture 3 | CHE 111 - Fundamentals of Chemistry | $y 3$ |
| BIO 121 - General Biology I | 4 | HRT 102 - Horticulture Soils | 3 |
| MAT 105 - Intermediate Algebra or |  | HRT 105 - Woody Plants I | 3 |
| MAT 121 - College Algebra | 3 | HRT Elective | 3 |
| HRT 104 - Herbaceous Plants | 3 |  | 15 |
| HRT Elective | 3 |  |  |
|  | 16-17 |  |  |
| Summer HRT 290 Internship | 3 or 4 | Total 3/4 |  |
| Second Year |  |  |  |
| First Semester S | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ENG 261 - Technical Comm. |  | HRT Elective | 3 |
| HRT 115 - Plant Insects and Diseases | 3 | HRT Elective | 3 |
| HRT Elective | 3 | Health \& Physical Education | 1 |
| CIS 110 - Intro. to Micro. Comp. | 3 | Social Science Elective | 3 |
| HRT Elective | $\underline{3}$ | HUM/HIS Elective | $\underline{3}$ |
|  | 15 |  | 13 |

Total Credits 62-63

| General Horticulture |  |
| :--- | :---: |
| HRT 106 | HRT 205 |
| HRT 107 | HRT 214 |
| HRT 109 | HRT 216 |
| HRT 111 | HRT 220 |
| HRT 113 | HRT 222 |
| HRT 201 |  |

[^30]HRT 113
HRT 201

## Floral Design/

Interior Landscape
HRT 107 HRT 113
HRT 109 HRT 205
HRT 111 HRT 214

Landscaping Design and
Construction
HRT 106 HRT 214
HRT 107 HRT 216
HRT 113 HRT 220
HRT 201 HRT 222

## HOTEL AND RESTAURANT MANAGEMENT

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

This curriculum is designed to prepare for direct job entry into the hotel, catering, restaurant and resort management fields. Emphasis is placed upon the management of food services, food preparation and middle-level hotel administration. Basic principles of operation and management are stressed. Concentration is on the practical application of these principles, involving the most up-to-date techniques of the industry. The specific courses are implemented 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 business courses. A limited number of scholarships are available from the industry annually. In addition, there is an existing and continuing oppurtunity for an internship with Disney World, Orlando, FL as well as a working relationship with Seafarers International Union.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

|  | First Year |  |  |
| :--- | ---: | :--- | :--- | :--- |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ENG 101 - English Composition | 3 | ENG 261 - Technical Communications or |  |
| * FYE 101 - First Year Experience | 1 | SPE 125 - Fundamentals of Speech | 3 |
| HRM 105 - Sanitation and Safety | 3 | HRM 122 - Food Purchasing | 3 |
| HRM 101 - Fundamentals of Food | 3 | HRM 126-Quantity Food Preparation | 4 |
| HRM 109 - Nutrition and Menu |  | CIS 104 - Hospitality Computer Applicaions | 3 |
| Planning | 3 | HRM 132 - Property Management and |  |
| Social Science Elective | $\underline{3}$ | Housekeeping | 3 |
|  | $15-16$ | Health \& Physical Education | 1 |
|  |  | HRM 260 - H\&R Work Experience Practicum $\frac{0}{17}$ |  |


| Second Year |  |  |  |
| :--- | :---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ACC 104 - Hotel and Restaurant Accounting | 3 | Humanities or History Elective | 3 |
| MAT 103 - Applied Mathematics for |  | HRM 130 - Hotel and Restaurant Operation | 3 |
| Industry | 3 | HRM 140 - Professional Food Service | 2 |
| HRM 217 - Meat Analysis | 3 | Science Elective | 3 |
| HRM 213 - Beverage Operations | 3 | HRM 228 - Management, Financial |  |
| HRM 134 - Management in the Hospitality |  | Analysis and Planning |  |
| Industry | 3 | HRM 211 - Layout of Food Service | 3 |
| HRM 215 - Marketing for the Hospitality |  | Equipment |  |
| Industry | $\frac{3}{18}$ |  | 17 |

Total Credits 67-68

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 noncredit). 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.

[^31]
## 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 Year

| First Semester | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| * FYE 101 - First Year Experience | 1 |
| PSY 103 - General Psychology | 3 |
| SOC 215 - Principles of Sociology | 3 |
| HMS 101 - Introduction to Human |  |
| Services | 3 |
| HMS 102 - Interview/Communication |  |
| Skills | 3 |
| Health \& Physical Education | $\frac{1}{1}$ |
|  | $16-17$ |


| s. Second Semester | Sem.-Hrs. |  |
| :--- | :--- | ---: |
| 3 | ENG 102 - Advanced Composition or |  |
| 1 | SPE 125 - Fundamentals of Speech | 3 |
| 3 | PSY 217 - Developmental Psychology | 3 |
| 3 | SOC 216 - Social Issues | 3 |
|  | HMS 201 - Introduction to Counseling | 3 |
| 3 | Science Elective | $\underline{3}$ |
|  |  | 15 |

3

16-17

|  | Second Year |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| 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 | $\underline{3}$ | HMS 221 - Field Work II | $\underline{3}$ |
|  | 15 |  | 15 |

Total Credits 61-62
NOTE: Students need to maintain a minimum grade of $C$ in Human Services courses to get into field work.

[^32]
## INTEGRATED ENTERTAINMENT TECHNOLOGY

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

The Integrated Entertainment Technology curriculum utilizes a "hands-on" approach to provide the student with a comprehensive understanding of the theory and skills necessary to integrate whole-system audio, video entertainment and automation and security systems into today's modern home and business.

These systems are becoming more popular because of their ability to centralize video and audio entertainment equipment. As an Integrated Entertainment Technician (IET), your goal is to provide the customer with the best hardware choices currently available and the ability to easily upgrade in the future as part of the whole-systems technology solution.

A distributed entertainment system is designed to disseminate audio and video signals from a central media room to the rest of a home or business, allowing the consumer to turn components on and off or adjust the volume change the program or regulate the climate with a series of controls from any room in the building.

Graduates of this program may be employed as a home technology system designer, systems integration specialist, technical sales professional, custom home theater installer and are eligible for the Installer Level I \& II certification exams.

| REQUIRED COURSES / RECOMMENDED SEQUENCE |  |  |  |
| :---: | :---: | :---: | :---: |
| First Year |  |  |  |
| First Semester |  | Second Semester |  |
| ENG 101 - English Composition I | 3 | IET 210 - Distributed Audio |  |
| * FYE 101 - First Year Experience | 1 | Entertainment Integration | 3 |
| MAT 103 - Applied Math | 3 | SPE 125 - Fundamentals of Speech | 3 |
| IET 103 - Construction And Fabrication |  | PHY103- Physics for the Trade |  |
| Practices For Entertainment |  | Technologies | 3 |
| Integration | 3 | GET 109 - Blueprint Reading | 3 |
| EET 125 - Electronics for Music Recording | - 4 | CIS 186 - Networking Concepts | 3 |
| CIS 107 - Computers for Mass Media | 3 |  | 15 |
|  | 16-17 |  |  |
| Second Year |  |  |  |
| Third Semester |  | Fourth Semester |  |
| ENG 261 - Technical Communications | 3 | IET 225 - Distributed Video |  |
| BUS 210 - Customer Service | 3 | Entertainment Integration | 3 |
| CEL 116 - National Electric Code | 2 | BUS 248 - Small Business |  |
| IET 215 - Electronics for Entertainment |  | Management | 3 |
| Integration | 3 | IET 230 - Automation \& |  |
| JOR 100 - Introduction to Mass |  | Environmental Control | 3 |
| Communications | 3 | IET-220-Security Systems | 3 |
| Health \& Physical Education | 1 | Social Science Elective | 3 |
|  | 15 |  | 15 |

[^33]
## 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



[^34]
## 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.

\author{

REQUIRED COURSES / RECOMMENDED SEQUENCE <br> First Year <br> | First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| JOR 100 - Intro. to Mass Communications | 3 | JOR 102 - Advanced News Reporting | 4 |
| JOR 101 - Introduction to Journalism \& |  | JOR 201 - Copy Editing/Make-up | 3 |
| $\quad$ 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 1865 | 3 |
| ENG 101 - English Composition | $\underline{3}$ | Health \& Physical Education | $\underline{1}$ |
| * FYE 101 - First Year Experience | 1 |  | 17 |

}

|  | Second Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| JOR 103 - Feature Writing | 4 | JOR 202 - Advertising Theory/Design | 3 |
| COM 104 - Prep \& Use of Multi-Media/ |  | 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 | $\underline{3}$ | Humanities or History Elective | 3 |
|  | 16 | JOR, COM or CAR Elective | $\underline{3}$ |

Total Credits 68-69

## ELECTIVES

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

[^35]
## KITCHEN AND BATH TECHNOLOGY

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

The Associate in Applied Science Program in Kitchen and Bath Design prepares students to enter a career path leading to professional certification in kitchen and bath design. After completing degree requirements and requisite on the job experience, individuals become eligible to take the associate certification exam offered by the National Kitchen and Bath Design Association. Students explore basic design principles, product and material technical data, and mechanical concepts related to the design of interior kitchen and bath environments. 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, surface finishes, and cabinetry. Students will develop skill in the survey of existing conditions, manual drafting, computer assisted drafting, presentation drawings, estimating, and specification writing in the production of design proposals and project, 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 kitchen/bath design, sales, project management, drafting, cabinet design, installation, manufacturer's representative, etc.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Year |  |  |
| :---: | :---: | :---: |
| First Semester Sem.-Hr | Sem.-Hrs. | Second Semester Sem.-Hrs. |
| ARC 110 - Architectural Design Graphics I | aphics I 4 | INT 135 - Introduction to Interior Design 3 |
| MAT 103 - Applied Math for Industry | try 3 | KBD 120 - Kitchen and Bath |
| ARC 114 - Building Materials and |  | Equipment \& Materials 3 |
| Construction Processes | 3 | ARC 212 - Mechanical Equipment 3 |
| CAD 101 - Computer Assisted Design I | gn I 3 | History/Humanities Elective 3 |
| ENG 101 - English Composition I | 3 | ARC 175 - Architectual Design Graphics II $\underline{3}$ |
| * FYE 101 - First Year Experience | 1 | 15 |
| 16-17 |  |  |
| Third Semester Sem.-Hr | Sem.-Hrs. | Fourth Semester Sem.-Hrs. |
| KBD 220- Kit.\& Bath Design |  | SPE 125 - Fundamentals of Speech 3 |
| Drafting \& Presentation | 3 | KBD 230 - Kitchen \& Bath Design Studio II 3 |
| KBD 225 - Kitchen \& Bath Design Studio I | Studio I 3 | ** KBD 290 - Kitchen \& Bath Design Practicum |
| ARC 205 - Architectural Design I | 3 | BUS 203 - Introduction to Sales 3 |
| ARC 112 - Architectural Drafting I | 4 | PHY 103 - Physics for the Trade Technologies 3 |
| ARC 219 - Estimating \& |  | Social Science Elective 3 |
| Architectural Practice | $\underline{3}$ | HPE - Health/Phys. Education Elective 1 |
|  | 16 | 16 |

Total Credits 63-64
*First-time students only.

[^36]
## LEGAL ASSISTING (PARALEGAL)

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

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 <br> LEGAL ASSISTING - PART TIME

| Fall | Sem.-Hrs. | Spring | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| $\quad$ LAP 100 - Intro. Paralegal Studies | 3 | LAP 101 - Legal Research | 3 |
| BUS 261 - Business Law I | 3 | BUS 262 - Business Law II | $-\frac{3}{6}$ |
| OMT 119 - Typing | 1 |  |  |
| * FYE 101 - First Year Experience | $\underline{1}$ |  |  |

Fall
LAP 102 - Legal Writing
ENG 101 - English Composition

Sem.-Hrs.
Spring
Sem.-Hrs.
RET 107 - Real Estate Law 3
CIS 110 - Intro to Microcomputer with Microsoft Office

| Fall | Sem.-Hrs. |
| :--- | ---: |
| LAP 201 - Tort and Criminal Law | 3 |
| ACC 111 - Principals of Accounting | $\underline{3}$ |
|  | 6 |

Spring Sem.-Hrs.
LAP 202 - Estate Law 3
Mathematics Elective -3
6
Fall
LAP 205 - Family Law
MAT 107 - Basic Statistics or
BUS 107 - Mathematics of Finance

Sem.-Hrs.
Spring
Sem.-Hrs.
LAP 203 - Corporate Law
3
LAP 206 - Civil Litigation $-\frac{3}{6}$

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

Spring Sem.-Hrs.
LAP 2 O 4 - Bankruptcy Law 3
LAP 279 - Legal Assisting Internship 3
Science Elective $\quad \frac{3}{9}$
Total Credits 68-69

## MEDICAL OFFICE ASSISTANT/INSURANCE SPECIALIST

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

The Medical Office Assistant/insurance Specialist is designed to provide the student with a basic knowledge of medical office and insurance procedures. Major emphasis will be put on medical terminology and reimbursement from insurances with a concentration on medical office skills. This will enable the student to work as a medical office assistant or medical secretary in a doctor's office, hospital or insurance company, as well as in other medical related fields and operations. Positions are also available for medical office assistants in government, armed services, laboratories, health departments of industry and medical schools.


[^37]
## MEDICAL OFFICE ASSISTANT/TRANSCRIPTIONIST

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

The Medical Office Assistant/Transcriptionist program is designed to provide the student with a basic knowledge of medical office and hospital procedures. Major emphasis will be put on medical terminology and medical transcription with a concentration on Medical Office skills. This will enable the student to work as a medical transcriptionist, as well as in other medical related fields and operations. Positions are also available for medical office assistants in government, armed services, laboratories, and health departments of industry and in medical schools.

REQUIRED COURSES / RECOMMENDED SEQUENCE
First Semester
OMT 125 - Beginning Typing or
OMT 126 - Intermediate Typing
OMT 130 - Medical Terminology I
OMT 133 - Medical Office Procedures I
CIS 110 - Introduction to Microcomputers
ENG 101 - English Composition

* FYE 101 - First Year Experience


## First Year

## Second Semester

3 OMT 135-Reimbursement Methodology/Coding 3 OMT 230 - Medical Terminology II 3
SPE 125 - Fundamentals of Speech 3
OMT 233 - Medical Office Procedures II 3
BIO 125 - Basic Human Anatomy \& Physiology or BIO 130-Basic Anatomy 4
Health \& Physical Education 1

## Third Semester

Second Year
Fourth Semester
OMT 109 - Word Processing Communications 3 OMT 299 - Internship 3
OMT 234 - Medical Transcription I 3
3
ENG 261 - Technical Communications 3
CIS 111 - Word Processing with Microsoft Word

3
BUS 105 - Business Math $\underline{3}$
Total Credits 62-63

[^38]
## 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 | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| * FYE 101 - First Year Experience | 1 |
| MAT 111 - Technical Math I or |  |
| MAT 121 - College Algerbra | $3-5$ |
| MST 100 - Basic Machine Shop Principles | 3 |
| MST 101 - Basic HP Engine |  |
| Blueprinting | 3 |
| MST 102 - Intro to Motorsports | 1 |
| MST 108 - Computer Assisted Design | $\underline{3}$ |


|  | Second Year |  |  |
| :--- | :---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester |  |
| SPE 125 - Fundamentals of Speech |  | Business Elective | Sem.-Hrs. |
| or History Elective | 3 | MST 111 Cylinder Head Design/Fuel Mgt. | 3 |
| MST 106 - Fabrication/Welding II | 3 | MST 112 Drive Line Systems | 3 |
| MST 107 - Intro to Combustion/Fuel/ |  | AUT 117 - Specialized Electronics Training | 3 |
| Ignition | 3 | MST 113 - Rear Assembly | 3 |
| MST 109 - Chassis/Suspension/Brakes | 3 | Social Science Elective | 3 |

BUS 231 - Management/Finance 3

MST 110 - Motorsports Safety Practices $\underline{17}$
17
Total Credits 68-70

* 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| MRT 110 - Introduction to Music Recording | 5 | MRT 220 - Advanced Music Recording | 3 |
| EET 125 - Electronics for Music Recording | 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 Media | 3 | JOR 100 - Introduction to Mass |  |
| Health \& Physical Education | $\underline{1}$ | Communications | $\underline{3}$ |
|  | $16-17$ |  | 16 |


| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| 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 History) | 3 |
| Humanities/History Elective | $\underline{3}$ | MRT 122- On-Location Recording | $\underline{3}$ |
|  | $\underline{16}$ |  | 15 |

Total Credits 63-64

* First-time students only.
** 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 Penn State'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 S | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| 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 |
|  | 16-18 |  |  |
| Summer Session |  |  |  |
| Physics (Minimum PHY 123- Technical Physics I ) 4 |  |  |  |
| Second Year |  |  |  |
| First Semester S | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| Physics continue Sequence (Minimum PHY 124- Tech Physics II) | 4 | NMT 211 - Safety and Equipment | erview |
| GET 252 - Intro to Nanofabrication |  | NMT 212-Basic Nanofabrication | cesses 3 |
| Manufacturing | 1 | NMT 213- Thin Films in Nanofab | 3 |
| ENG 261 - Technical Communications | s 3 | NMT 214- Lithography for Nano | rication 3 |
| CIS 158 - Object Oriented Programming with C++ | ng 3 | NMT 215- Materials Modification Nanofabrication | 3 |
| Social Science Elective | 3 | NMT 216 - Characterization, Pack | ng and |
| History or Humanities Elective | 3 | Test Nano Structures | 3 |
|  | 17 |  | 18 |
| * First-time students only |  | Tota | redits 66-69 |

# 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 Penn State'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

| First Semester | Sem.-Hrs. | Second Semester Sem | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| EET 120 - Electrical Theory | 4 | GET 252 - Introduction to Nanofabrication |  |
| BIO 121 - General Biology | 4 | Processing | 1 |
| MAT 111 - Technical Mathematics I 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 | $16-\frac{1}{-18}$ | CIS 110 - Intro to Microcomp./MS Office or CIS 158 - Object Oriented Programming |  |
|  |  | with $\mathrm{C}++$ | 3 |

## Summer Session

Physics (Minimum PHY 123- Technical Physics I ) 4

| Second Year |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester <br> Physics continue sequence | Sem.-Hrs. | Second Semester Sem.-H | Sem.-Hrs. |
|  |  |  |  |
| (Minimum PHY 124 - Tech. Physics II) | ) 4 | NMT 211 - Safety and Equipment Overview |  |
| GET 252 - Intro to Nanofabrication |  | for Nanofabrication | 3 |
| Manufacturing | 1 | NMT 212 - Basic Nanofabrication Processes | 3 |
| ENG 261 - Technical Communications | 3 | NMT 213 - Thin Films in Nanofabrication | 3 |
| CHE 152 - General Chemistry II | 4 | NMT 214 - Lithography for Nanofabrication | 3 |
| Social Science Elective | 3 | NMT 215 - Materials Modific. in Nonofab. | 3 |
| History or Humanities Elective | 3 | NMT 216 - Characterization, Packaging |  |
|  | 18 | and Test Nano Structures | 3 |

* 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.

## First Year

## First Semester

Sem.-Hrs. Second Semester
Sem.-Hrs.

| 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 |
| $\quad$Plant Systems | 3 | PHY 123 - Technical Physics I | $\underline{4}$ |
| Health \& Physical Education <br> or EMS 207 |  |  | 16 |
| * FYE 101 - First Year Experience | 1 |  |  |
|  | $16-17$ |  |  |

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| Second Year |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester Se | Sem-Hrs. | Second Semester Se | Sem Hrs. |
| ENG 102 - Advanced Composition or |  | CIS 170 - Management |  |
| ENG 261 - Technical Communications | ns 3 | Information Systems | 3 |
| CHE 151 - General Chemistry I | 4 | NET 205 - Fundamentals of |  |
| NET 203 - Atomic and Nuclear |  | Health Physics | 3 |
| Physics | 3 | NET 206 - Reactor Core Fundamentals | als 3 |
| NET 204 - Automatic Process Controls | ols 3 | NET 208 - Human Performance |  |
| PHY 124 - Technical Physics II | $\underline{4}$ | Technology/Error Avoidance | 2 |
|  | 17 | SPE 125 - Fundamentals of Speech | 3 |
|  |  | Social Science Elective | $\underline{3}$ |

*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. 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 (2008, 2010, 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 (2007, 2009, 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 $(2007,2009)$. Class and clinical experiences are held after $3 \mathrm{p} . \mathrm{m}$. 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.
The nursing program is approved by the Pennsylvania State Board of Nursing and is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York City, NY 10006. Telephone (212) 363-5555.

# 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| NUR 124 - Intro. to Issues in Nursing | 1 | NUR 125 - Transition into A.D. Nursing | 2 |
| (NUR 124 is a required prerequisite to NUR 101) |  | (NUR 125 is a required prerequisite for advanced |  |

First Year

First Semester
NUR 101 - Intro. to Nursing in the Health Care System
BIO 135 - Anatomy and Physiology I
PSY 103 - General Psychology
ENG 101 - English Composition

* FYE 101 - First Year Experience

Sem.-Hrs. Second Semester Sem.-Hrs.
NUR 102 - Nursing Within the Life Cycle
BIO 136 - Anatomy and Physiology II 4
PSY 217 - Developmental Psychology $\underline{16}$

|  | Second Year |  |  |
| :---: | :---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| NUR 203 - Nursing Care of Clients with |  | NUR 204 - Nursing Care of Clients with |  |
| Acute and Chronic Health Problems | 9 | Complex Health Problems | 9 |
| BIO 251 - General Microbiology | 4 | NUR 224 - Nursing in Society | 1 |
| SOC 215 - Principles of Sociology | $\boxed{3}$ | ENG 102 - Advanced Composition | 3 |
|  | 16 | Elective | 3 |
|  |  | Health \& Physical Education | $\frac{1}{17}$ |

Total Credits 69-70
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.

* First-time students only.


## ELECTIVES

NUR 130 - Calculations for Medication Administration
NUR 220 - Pharmacology/Pathophysiology for Health Care Professionals
NUR 221 - Physical Assessment

## OFFICE MANAGEMENT AND MICROCOMPUTER APPLICATION SPECIALIST

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

The Office Management and Microcomputer Application Specialist curriculum is concerned with the study of office procedures, communication and management skills, and computer software. Students are prepared to enter the workforce as: Office and Administrative Support Supervisors or Managers, Administrative Assistants, Executive Secretaries, Consultants, Corporate Trainers, Database Administrators, Help Desk Technicians, Information Systems Auditors, Market Research Analysts, Multimedia Developers, PC Support Specialists or Technical Writers in areas such as education, health, legal, manufacturing, construction, trade, transportation, communications, banking, insurance, investments, real estate or government.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Year

| First Semester Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :---: | :---: | :---: |
| ENG 101 - English Compostion 3 | SPE 125 - Fundamentals of Speech | 3 |
| * FYE 101 - First Year Experience 1 | Science Elective | 3 |
| MAT - Math Elective or BUS 105 | ACC 111 - Principles of Accounting I |  |
| CIS 110 - Introduction to Microcomputers with Microsoft Office | BUS 101 - Introduction to Business BUS, OMT or CIS Elective | 3 3 |
| OMT 109 - Word Processing Communications 3 | BUS 263 - Office Management | 3 |
| OMT 125 - Beginning Typewriting or |  | 18 |
| OMT 126 - Intermediate Typewriting 3 |  |  |
| Health \& Physical Education or |  |  |
| EMS 207 - Cardio-Pulmonary |  |  |
| Resuscitation (CPR) 16-17 |  |  |


| Second Year |  |  |  |
| :--- | ---: | :---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ENG 261 - Technical Communications | 3 | OMT 254 - Office Procedures II | 3 |
| BUS 251 - Human Resource Management | 3 | OMT 299 - Office Practice Internship or |  |
| OMT 154 - Office Procedures I | 3 | CIS 299 - Computer Information Systems |  |
| CIS 111 - Word Processing with |  | Internship | 3 |
| Microsoft Word | 3 | CIS 114 - Database Analysis using |  |
| CIS 112 - Spreadsheet Analysis using |  | Microsoft Access | 3 |
| Microsoft Excel | 3 | CIS 213 - Desktop Publishing | 3 |
| CIS 140 - Introduction to the Internet or |  | Social Science Elective | 3 |
| CIS 142 - Strategic Business Plans with |  |  | 3 |

## the Internet or

** CIS 240 - World Wide Web Concepts and Designs $\frac{3}{18}$

[^39]
## 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 <br> First Year

| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | ENG 261-Technical Communications or |  |
| * FYE 101 - First Year Experience | 1 | SPE 125 - Fundamentals of Speech | 3 |
| MAT 103 - Math for the Industry | 3 | HRM 122 - Food Purchasing | 3 |
| HRM 105 - Food Sanitation \& Safety | 3 | CUL 102 - Pantry \& Cold Food Production | 4 |
| PAS 101 - Introduction to Pastry Arts/Breads | 4 | PAS 103-Basic Cakes \& Cake Decoration | 4 |
| Social Science Elective | $\boxed{3}$ | CIS 106-Computers for the Industry (HRM) | 3 |
|  | $16-17$ | HRM 260-Hotel Restaurant Work <br> Experience Practicum | $\underline{0}$ |


| Second Year |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| ACC 104 - Hotel \& Restaurant Accounting | 3 | History or Humanities Elective | 3 |
| HRM 134 - Management in the Hospitality |  | Science Elective | 3 |
| Industry | 3 | PAS 105 - Tortes \& Specialty Cakes | 4 |
| HRM 109 - Nutrition \& Menu Planning | 3 | PAS 106 - Chocolates \& Decorative Baking | 4 |
| PAS 104 - Plated Desserts, Creams, |  | HRM 228-Management Financial Analysis |  |
| Puddings, Sauces | 4 | \& Planning |  |
| PAS 102 - The Art of Pastry | 4 |  | 17 |

Health \& Physical Education

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.

[^40]
# 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| ENG 101 - English Composition | 3 | Humanities or History Elective |  |
| * FYE 101 - First Year Experience | 1 | (ENG 261-Technical Communications | 3 |
| MAT 103 - Mathematics for Industry (Trade) | 3 | CEL 103 - Basic Construction Wiring | 3 |
| PLH 108 - Blueprint Reading and Estimating |  | 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 Systems |  |
| PLH 128 - PLH Code | $\underline{3}$ | and Designs | 4 |
|  | $16-17$ | Health \& Physical Education | $\frac{1}{18}$ |


|  | Second Year |  |  |
| :--- | ---: | :--- | ---: |
| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| SPE 125 - Fundamentals of Speech | 3 | PLH 105 - Controls for Heating | 4 |
| HAC 103 - Warm Air Heating \& Air |  | PLH 222 - Advanced Heating Technology | 4 |
| Conditioning Design/Installation | 4 | PLH 224 - Mechanical (Heating) Code | 3 |
| ** PLH 118 - Basic Heating Technology | 4 | PLH 232 - Internship | 3 |
| **PLH 120 - Heating System Design |  | Social Science Elective | -3 |
| and Installation | 4 |  | 17 |
| PLH 230 - Internship | $\underline{3}$ |  |  |

[^41]
## 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).

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year<br>Summer Semester

| First Session |  |
| :--- | ---: |
| Course Title |  |
| MAT 101 - Survey of Mathematics or |  |
| Mat 105 - Intermediate Algebra | 3 |
| $* *$ Chemistry with Lab | $\underline{3-4}$ |
|  | $6-7$ |

Fall Semester
Course Title Sem.-Hrs.
RTT 105 - Orientation to Respiratory Therapy2

RTT 111 - Fundamentals of Respiratory Therapy I

5
BIO 136 - Anatomy and Physiology II
ENG 101 - English Composition
EMS 207 - CPR

* FYE 101 - First Year Experience3

$$
10-10
$$

| Course Title | Sem.-Hrs. |
| :--- | ---: |
| BIO 135 - Anatomy and Physiology | $\underline{4}$ | BIO 135 - Anatomy and Physiology $\underline{4}$ 4

Second Session

## Spring Semester

Course Title Sem.-Hrs.
RTT 112 - Fundamentals of Respiratory Therapy II 6 RTT 150 - Respiratory Therapy Pharmacology
BIO 251 - General Microbiology 4
PSY 103-General Psychology


* First-time students only.
${ }^{* *}$ CHE 151 (General Chemistry I) and PHY 131 (General Physics I) are recommended for students who plan to transfer to a four-year institution and pursue a bachelor of science degree.
† Students who have not completed a high school course in physics are advised to take PHY 101.


## 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 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 of Luzerne County Community College, Wilkes-Barre General Hospital and Mercy Hospital. The curriculum consists of 28 semester-hours of science and humanities and 36 semester-hours of classes and supervised clinical practice.

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.

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

## REQUIRED COURSES / RECOMMENDED SEQUENCE



## WEB DEVELOPMENT TECHNOLOGY

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

This two-year Web Development curriculum is offered to prepare students for employment in the field of web design and development. In recent years businesses world wide have continued to offer more products and services via the Internet. Individuals completing this program will position themselves nicely to acquire entry level employment with a company who needs to maintain and update their web site.

Students admitted into this program will be introduced to the Internet as a tool for communications and commerce. They will learn the HTML language used to develop web pages and sites. Students will acquire the programming knowledge necessary to build multi-tier applications that connect content with data to produce dynamically driven web sites. They will learn to enhance those sites though the use of image and multimedia elements The student will be presented with both Open Source and proprietary web technologies as well as web server administration to broaden their scope and increase employment potential.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Summer Session | Sem.-Hrs. |
| :--- | ---: |
| CIS 108 - Information Processing | 3 |
| SPE 125 - Fundamentals of Speech | 3 |
| CIS 145 - Internet Concepts with HTML | 3 |
| ENG 101- English Composition I | 3 |
| Health \& Phy. Ed. or CPR | 1 |
| CAR 277 - Photo Image Enhancement | 3 |
| * FYE 101 - First Year Experience | $\underline{1}$ |
|  | 17 |

Third Semester Sem.-Hrs.
CIS 263 - Internet Active Server Pages with Visual Basic3

CIS 266 - Internet Programming with JAVA
CIS 246 - Client Side Web Development II
MAT 105 - Intermediate Algebra or MAT 121 - College Algebra
Elective Soc / Sci / Math $\underline{3}$
Second Summer Session Sem.-Hrs.
CIS 162- Programming with VisualBasic.NET3
CIS 156 - Programming with JAVA ..... 3
CIS 146 - Client Side Web Development I ..... 3
CIS 148 - Database Design with SQL ..... 3
Science Elective ..... - 315
Fourth Semester Sem.-Hrs.
CIS 268 - Server Administration w/Linux ..... 3CIS 290 - Computer InformationSystems Projects3
CAR 295 - Multimedia for the Web ..... 3
BUS 101- Intro to Business or BUS 248 - Small Business Administration ..... 3
Elective History or Humanities ..... $\underline{3}$15

[^42]
## ONE-YEAR 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 Art
Computer Graphics
Graphic Design
Painting Illustration
Photography
Computer Aided Drafting
and Design Technology
Computerized Numerical Control
Technology
Dental Assisting
Electrical Construction
Electronics Engineering Technology
Fire Science Technology
Food Production Management

Horticulture Technology
Hotel and Restaurant Management
Integrated Entertainment Technology
Medical Office Assistant
Microcomputer Applications
Microcomputer Programming
Office Management Technology
Pastry Arts Management
Plumbing and Heating Technology
Public Safety Communications
Warehouse Management Distribution
Web Development

## 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 | Sem.-Hrs. | Course Title | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | CIS 110 - Introduction to Microcomputers |  |
| 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 | $\underline{3}$ |
|  |  |  | 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 |  |
| :--- | ---: |
| EMS - 201 Paramedic (Part A) | 7 |
| EMS - 208 Water Rescue | 1 |
| EMS - 209 Emergency Vehicle Operation | $\underline{1}$ |
|  | 9 |
| Summer Session | 7 |
| EMS - 203 Paramedic (Part C) | 7 |
| EMS - 212 Pediatric Advanced Life Support | 1 |
| EMS - 205 Advanced Practice | $\underline{5}$ |

EMS 201 Wam Res (Part A) ..... 711
ummer Session

EMS - 212 Pediatric Advanced Life Support 1
EMS - 205 Advanced Practice $\underline{5}$

## Second Semester

EMS - 202 Paramedic (Part B) 7
EMS - 210 Basic Trauma Life Support 1
EMS - 211 Advanced Cardiac Life Support 1

## ARCHITECTURAL ENGINEERING TECHNOLOGY


#### Abstract

Program of Studies Leading to the Certificate of Specialization 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

ENG 101 - English Composition
MAT 103 - Math for Industry

* ARC 112 - Architectural Drafting I

ARC 114 - Building Materials

Sem.-Hrs. Second Semester
Sem.-Hrs.
3 ENG 261 - Technical Comm. 3
3 CAD 101 - Comp. Assisted Design I 3
4 ARC 219 - Est. and Architectural Practice 3
3 ARC 226 - Advanced Drafting 3
13 Elective -
15

| Summer | Sem-Hrs. |
| :---: | :---: |
| CAD 102 - Comp. Aided Drafting II | 3 |
|  | Credits 30 |

* 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 Sem.-Hr | Sem.-Hrs. | 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 Constructio | Wiring 4 |
| PLH 112 - Basic Plumbing \& Heating Systems | Systems 4 | PLH 114 - Adv. Plumbing Systems | 4 |
| CEL 103 - Basic Construction Wiring | 3 | HAC 101 - Basic Heating \& Cooling Technology Or |  |
| PLH 108 - Blueprint Reading \& Estimating | ting |  |  |
| Or |  | CEL 116 - National Electrical Code I |  |
| GET 109 - Blueprint Reading \& Estimating | ting 3 |  |  |
|  | 17 | CEL 119 - National Electrical Code II | 4 |

## BUSINESS MANAGEMENT

## Program of Studies Leading to the Certificate of Specialization

| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| 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 Microcomputers | 3 | BUS 251 - Human Resource Management | 3 |
| $\quad$ with Microsoft Office |  | Business Elective | $\underline{3}$ |
| BUS 201 - Principles of Marketing I | $\underline{3}$ |  | 15 |

ENG 101 - English Composition
Mathematics Elective

CIS 110 - Introduction to Microcomputers with Microsoft Office
BUS 201 - Principles of Marketing I

## 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

[^43]Sem.-Hrs. Second Semester Sem.-Hrs.
3 GET 118 - Descriptive Geometry 2
5 GET 122 - Manufacturing Processes II 3
3 PHY 121 - Technical Physics 4
3 CAD 101 - Computer-Assisted Design I 3
$\frac{3}{17}$ Technology Elective $\frac{3}{15}$

## 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

ENG 101 - English Composition
CIS 106 - Computers in Industry
CAR 245 - Typography
CAR 241 - Graphic Design I
CAR 276 - Publication Design

Sem.-Hrs. Second Semester
CAR 284 - Technical Illustration

CAR 277 - Photo Image Enhancement
CAR 283 - Advanced Publication Design 3
CAR 278 - Painting with the Computer 3
CAR 293 - Web Page Design 3
CAR 279 - Presentation/Portfolio $\underline{18}$
18

## 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
Sem.-Hrs.
MAT 111 - Technical Math I5
GET 113 - Technical Drafting ..... 3
GET 121 - Mfg. Processes I3
PHY 121 - Technical Physics$\frac{4}{15}$
*Recommended Technology Electives Sem.-Hrs.
ASR 207 - Fluid Power Applications ..... 3
EET 120 - Electrical Theory ..... 4
MAT 112 - Technical Math II ..... 5
Second Semester Sem.-Hrs.
ENG 101 - English Composition ..... 3
AMT 103-CNC Machining I ..... 4
GET 122 - Mfg. Processes II ..... 3
CAD 101 - Computer Assisted Design I ..... 3
GET 112 - Industrial Safety3-(4)-(5)
17-(18)-(19)

## 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 select the most qualified applicants (see ADMISSION TO THE HEALTH SCIENCE PROGRAMS).

## REQUIRED COURSES / RECOMMENDED SEQUENCE Summer Session (Summer II) <br> Sem.-Hrs.

| ENG 101 - English Composition | 3 |
| :--- | ---: |
| BIO 125 - Basic Anatomy \& Physiology | $\underline{4}$ |
|  | 7 |


| First Semester | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| DAS 101 - Chairside Dental Assisting 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 | 2 |
| DAS 104 - Dental Specialties | $\underline{3}$ | DAS 114 - Dental Assisting Clinical |  |
|  | 12 | Practice | $\underline{7}$ |

Certificate of Specialization Total 34

## 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 | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| MAT 103 - Applied Mathematics for |  |
| $\quad$ Industry | 3 |
| CEL 101 - D.C. \& A.C. Fundamentals | 4 |
| CEL 103 - Basic Construction Wiring | 3 |
| GET 109 - Blueprint Reading \& Estimating | $\underline{3}$ |


| Second Semester | Sem.-Hrs. |
| :--- | ---: |
| BUS 248 - Small Business Management | 3 |
| PLH 105 - Controls for Heating | 4 |
| CEL 112 - Advanced Electrical |  |
| $\quad$ Construction | 4 |
| CEL 121 - Electrical Motor Control I | 4 |
| CEL 116 - National Electrical Code | $\underline{2}$ |
|  | 17 |

## 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 | Sem.-Hrs. | Course Title | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| 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 | $\frac{3}{32}$ |

**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 | Sem.-Hrs. |
| :--- | ---: |
| FST 101 - Introduction to Fire Protection |  |
| and Prevention | 3 |
| PHY 101 - Intro. to Physical Science | -3 |
|  | 6 |
| Summer Session | Sem.-Hrs. |
| ENG 101 - English Composition | 3 |
| PSY 103 - General Psychology | -3 |
|  | 6 |
| Third Semester | Sem.-Hrs. |
| FST 111 - Fire Service Management | 3 |
| FST 121 - Fire Fighting Tactics \& Strategy | $\underline{3}$ |


| Second Semester | Sem.-Hrs. |
| :--- | ---: |
| FST 112 - Fire Protection Systems | 3 |
| MAT 103 - Applied Mathematics for |  |
| Industry | $\frac{3}{6}$ |
|  |  |
|  |  |
|  |  |
| Fourth Semester | Sem.-Hrs. |
| FST 201 - Building Codes and Construction |  |
| FST 203 - Principles of Inspection | $\underline{3}$ |

## FOOD PRODUCTION MANAGEMENT

## Program of Studies Leading to the Certificate of Specialization

The Food Production Management 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 Se | Sem.-Hrs. | Second Semester Sem. | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| ENG 101 - English Composition | 3 | CUL 102 - Pantry \& Cold Food Production | 4 |
| CUL 103 - Meat Analysis \& Preparation | n 4 | HRM 122 - Food Purchasing | 3 |
| CUL 105 - Soup \& Sauce Analysis/ |  | CUL 106 - Baking Techniques \& Analysis | 3 |
| Preparation | 4 | HRM 130 - Hotel \& Restaurant Operations | 3 |
| CUL 108 - Food Sanitation \& Safety | 3 | HRM 228 - Managerial Financial Analysis |  |
| HRM 109 - Nutrition \& Menu Planning | g 3 | and Planning | 3 |
| CUL 104 - Fruit \& Vegetable Preparation | on 3 |  | 16 |

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

## 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 | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| CAR 220 - Basic Photography | 3 |
| CAR 241 - Graphic Design I | 3 |
| CAR 129 - Color and Design I | 3 |
| CIS 106 - Computers in Industry | $\underline{3}$ |

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

## 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 design.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Semester | Sem.-Hrs. | Second Semester | Sem.Hrs. |
| :---: | :---: | :---: | :---: |
| HRT 101 - Fundamentals of |  | ENG 101 - English Composition | 3 |
| Horticulture | 3 | CIS 110 - Intro. to Micro. Comp. | 3 |
| BIO 101 - Intro Biology I | 3 | HRT 115 - Plant Insects and Disease | 3 |
| MAT 105 - Intermediate Algebra | 3 | HRT 105 - Woody Plants I | 3 |
| HRT 104 - Herbaceous Plants | 3 | HRT Elective | 3 |
| HRT Elective | 3 |  | 15 |
|  | 15 |  |  |
|  | Horticult | Electives |  |
| HRT 106 |  | HRT 111 |  |
| HRT 109 |  | HRT 205 |  |

## HOTEL AND RESTAURANT MANAGEMENT

## Program of Studies Leading to the Certificate of Specialization

The HRM 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| 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 Planning | 3 | HRM 126 - Quantity Food Preparation | 4 |
| BUS 251 - Personnel Administration or |  | HRM 130 - Hotel and Restaurant | 3 |
| HRM 134 - Management in the |  | HRM 132 - Property Management |  |
| Hospitality Industry | $\underline{3}$ | and Housekeeping | $\underline{3}$ |
|  | 15 |  | 16 |

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

## INTEGRATED ENTERTAINMENT TECHNOLOGY

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

Integrated Entertainment Technology certificate curriculum utilizes a "hands-on" approach to provide the student with a comprehensive understanding of the entry level skills necessary to integrate whole-system audio, video entertainment and automation and security systems into today's modern home and business.

These systems are becoming more popular because of their ability to centralize video and audio entertainment equipment. As an Integrated Entertainment Technician (IET), your goal is to provide the customer with the best hardware choices currently available and the ability to easily upgrade in the future as part of the whole-systems technology solution.

Graduates of this program may be employed as a commercial AV installer/technician, data cable installer, security systems installer, entry level home technology systems integrator, and as a home entertainment sales professional.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Semester

$\begin{array}{lr}\text { ENG } 101 \text { - English Composition } & 3 \\ \text { MAT } 103 \text { - Applied Math } & \\ \quad \text { Construction And Fabrication } & 3 \\ \text { IET } 103 \text { - Practices For Entertainment } & 3 \\ \quad \text { Integration } & \\ \text { EET } 125 \text { - Electronics for Music Recording } & 4 \\ \text { CIS } 107 \text { - Computers for Mass Media } & \underline{3}\end{array}$

## Second Semester

IET 210 - Distributed Audio
Entertainment Integration 3
CIS 186 - Networking Concepts 3
IET 225 - Distributed Video
Entertainment Integration 3
IET 230 - Automation \& Environmental Control

3
IET 220 - Security Systems $\underline{3}$

## MEDICAL OFFICE ASSISTANT

## Program of Studies Leading to the Certificate of Specialization

The Medical Office Assistant Certificate Program is designed to provide the student with a basic knowledge of medical office and insurance procedures. Major emphasis will be put on medical terminology and reimbursement from insurances with a concentration on medical office skills. This will enable the student to work as a medical secretary, receptionist or medical office assistant in a doctor's office, hospital or insurance company as well as in other medical related fields and operations. Positions are also available for medical office assistants in government, armed services, laboratories, health departments of industry and medical schools.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester
OMT-125 Beginning Typing OROMT-126 Intermediate TypingOMT-130 Medical Terminology IOMT-133 Medical Office Procedures ICIS-110 Introduction to Microcomputers
OMT-109 Word Processing Communications33333
Second SemesterOMT-135 ReimbursementMethodology/Coding3
OMT-230 Medical Terminology II ..... 3
OMT-234 Medical transcription I ..... 3
OMT-233 Medical Office Procedures II ..... 3
OMT-299 Internship ..... 3

## MICROCOMPUTER APPLICATIONS

## Program of Studies Leading to the Certificate of Specialization

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Semester Sem.-Hr | Sem.-Hrs. | Second Semester S | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| * OMT 119 -Keyboarding | 1 | CIS 112 - Spreadsheet Analysis using |  |
| CIS 110 - Introduction to Microcomputers with Microsoft Office |  | Microsoft Excel | 3 |
|  |  | CIS 114 - Database Analysis using |  |
| CIS 111 - Word Processing with |  | Microsoft Access | 3 |
| Microsoft Word | 3 | CIS 116 - Presentation Design using |  |
| CIS 120 - PC Operating Systems with |  | Microsoft Powerpoint | 3 |
| Microsoft Windows | 3 | CIS 213 - Desktop Publishing | 3 |
| ENG 101 - English Composition | 3 | ENG 261 - Technical Communications | - 3 |
| MAT 105 - Intermediate Algebra or |  |  | 15 |
| Higher Math | 3 |  |  |

* May test out as a result of Placement Testing.


## MICROCOMPUTER PROGRAMMING

## Program of Studies Leading to the Certificate of Specialization

## REQUIRED COURSES / RECOMMENDED SEQUENCE



[^44]
## OFFICE MANAGEMENT TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

## REQUIRED COURSES / RECOMMENDED SEQUENCE



## 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 | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| CAR 119 - Drawing I | 3 |
| CAR 132 - Life Drawing I | 3 |
| CAR 243 - Materials and Techniques | 3 |
| Painting Elective | $\underline{3}$ |
|  | 15 |

15
Second Semester Sem.-Hrs.
CAR 120 - Drawing II ..... 3
CAR 133 - Life Drawing II ..... 3
CAR 129 - Color and Design I ..... 3
CAR 220 - Basic Photography ..... 3
Painting Elective ..... 315

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| PAS 101 - Introduction to Pastry Arts/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 Planning | 3 | CIS 104 - Hospitality Computer Operations | 3 |
| PAS 104 - Plated Desserts, Creams, |  | CUL 102 - Pantry \& Cold Food Production | $\frac{4}{17}$ |
| Puddings, Sauces | $\underline{4}$ |  | 1 |

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :--- | ---: |
| ENG 101 - English Composition | 3 | CAR 272 - Photo Studio \& Lab II | 3 |
| CAR 119- Drawing I | 3 | CAR 268 - Nature Photography | 3 |
| CAR 220 - Basic Photography | 3 | CAR 260 - Color Photography | 3 |
| CAR 264 - Photo Light \& Composition | 3 | CAR 240 - Advanced Black \& White |  |
| CAR 271 - Photo Studio Lab I | $\underline{3}$ | Photography | 3 |
|  | 15 | Photo-related Elective | $\frac{3}{15}$ |

## 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 | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :--- | ---: | :---: | ---: |
| 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 | $\underline{3}$ |
| PLH 108 - Blueprint Reading \& |  |  | 15 |

Estimating
PLH 101 - Plumbing and Heating I

3

## PUBLIC SAFETY COMMUNICATIONS

## Program of Studies Leading to the Certificate of Specialization

The certificate of specialization in Public Safety Communications will enable the student to develop the specialized skills necessary to take 911 calls, direct EMS-EMA-Fire-Police resources, direct the general public in pre-arrival instructions, and handle all emergency calls as they may arise within a dispatch center. The student will also be evaluated and will gain experience in a realistic simulator console that will add to the development of their skills. Graduates of this program may be employed as call takers or dispatchers with local, state, private or federal dispatch centers. The successful student will also receive Pennsylvania State certification as mandated by the Telecommunications ACT.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Semester | Sem.-Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| PSC 101 - Telecommunicator (Part A) | 4 |
| PSC 102 - Telecommunicator (Part B) | 4 |
| EMS 207 - CPR | $\underline{1}$ |
|  | Sem.-Hrs. |
| Summer | 6 |

Second Semester

Sem.-Hrs.

PSC 103-Specific Dispatching 6
PSC 104 - EMD 6
PSC 105 - NCIC/CLEAN $\underline{3}$
15

## WAREHOUSE MANAGEMENT DISTRIBUTION

## Program of Studies Leading to the Certificate of Specialization

This curriculum is designed to develop a basic understanding of the entry-level skills necessary to be employed in the warehouse industry. The program is career-oriented and allows direct entry into the business community. Students will receive basic knowledge in these areas: warehousing, computers, and accounting principles. Graduates of this program may be employed at entry level positions in the warehouse industry.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Semester Sem | Sem.-Hrs. | Second Semester | Sem.-Hrs. |
| :---: | :---: | :---: | :---: |
| ENG 101 - English Composition | 3 | CIS 114 - Data Base Analysis | 3 |
| Math Elective (MAT 103 Recommended) | ed) 3 | BUS 165 - Logistics | 3 |
| ACC 111 - Principles of Accounting I | 3 | ACC 112 - Principles of Accounting II | II 3 |
| CIS 110 - Introduction to Microcomputers with MS Windows |  | BUS 231 - Principles of Management | 3 |
|  |  | BUS 161 - Principles of Purchasing | 3 |
| BUS 167 - Materials Management | 3 |  | TOTAL 15 |
|  | 15 |  |  |

## WEB DEVELOPMENT

## Program of Studies Leading to the Certificate of Specialization

The World Wide Web is the fastest growing communications tool in modern society. One of the newest and highest-demand occupations is Web Developer. A Web Developer's duties would focus on designing, creating, and maintaining web sites and web pages.

As organizations are using more intranets and extranets, the importance and demand for web design will continue to increase. Web Developers combine technical Internet skills with design and layout expertise.

This certificate program is designed to help students learn the basic skills of the Internet and World Wide Web, and gain professional skills needed to meet today's growing demand for Internet Web page developers.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

| First Semester | Sem.-Hrs. |
| :--- | ---: |
| $*$ OMT 119-Keyboarding | 1 |
| CIS 110- Introduction to Microcomputers |  |
| $\quad$ with Microsoft Office | 3 |
| CIS 145- Internet Concepts with HTML | 3 |
| CIS 156-Programming with JAVA | 3 |
| CIS 160 - Programming with Visual Basic or | 3 |
| CIS 162 - Programming with Visual Basic. NET |  |
| ENG 101-English Composition I | 3 |
| MAT 105- Intermediate Algebra or |  |
| Higher Math | $\underline{3}$ |
|  | $18-19$ |

18-19

* May test out as a result of Placement Testing.


## CURRICULA LEADING TO A DIPLOMA

Customer Service/Data Entry
Expanded Functions Dental Assisting (EFDA)
Food Production
Industrial Skills
Microcomputer Applications
Microcomputer Programming
Networking
Office Management Technology
Perioperative Nursing (for Registered Nurses or Graduate Nurses only) Recording Engineer

## CUSTOMER SERVICE/DATA ENTRY

## Program of Studies Leading to a Diploma

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester Sem.-Hrs.
OMT 119 - Keyboarding ..... 1
CIS 110 - Introduction to Microcomputers with Microsoft Office ..... 3
BUS 210 - Introduction to Customer Relations ..... 3
Social Science Elective
(SOC 215 recommended) ..... 3
BUS 105 - Business Math ..... 3
SPE 210 - Introduction to Interpersonal
Communications ..... 316

## 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 |  |
| :---: | :---: |
| ENG 101 - English Composistion | 3 |
| BIO 125 - Basic Anatomy and Physiology or | 4 |
| BIO 135 - Anatomy and Physiology I |  |
| EMS 207 - Cardio -Pulmonary Resuscitation 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 | $\underline{2}$ |
|  | 17 |

This is a part-time only program

## FOOD PRODUCTION

## 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 Food Production Management.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Semester

CUL 102 - Pantry and Cold Food Production
CUL 105 - Soup and Sauce Analysis/
Production
CUL 108 - Food Sanitation and Safety
HRM 109 - Nutrition and Menu Planning 3
CUL or HRM Elective $\underline{3}$
Sem.-Hrs.

17

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

## 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

ENG 101 - English Composition
MAT 103 - Applied Math for Industry
3
OMT 119 - Keyboarding 1
CIS 110 - Introduction to Microcomputers
with Microsoft Office 3
SPE 210 - Interpersonal Communications 3
Sociology Elective $\underline{16}$

## MICROCOMPUTER APPLICATIONS

```
Program of Studies Leading to a Diploma
    REQUIRED COURSES / RECOMMENDED SEQUENCE
```

First Semester
ENG 101- English Composition

* OMT 119 - KeyboardingCIS 110 - Introduction to Microcomputerswith Microsoft Office

CIS 111 - Word Processing with Microsoft Word
CIS 112 - Spreadsheet Analysis using Microsoft Excel
CIS 114 - Database Analysis using Microsoft Access 3
CIS 116 - Presentation Design using Microsoft Powerpoint3

```
* May test out as a result of Placement Testing.
```


## MICROCOMPUTER PROGRAMMING

## Program of Studies Leading to a Diploma

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester
ENG 101- English Composition 3
Sem.-Hrs.

* OMT 119-Keyboarding 1

CIS 110 - Introduction to Microcomputers with Microsoft Office 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 156 - Programming with JAVA 3
CIS 158 - Object-Oriented Programming with C++ 3
CIS 160 - Programming with Visual Basic or
CIS 162- Programming with Visual Basic. NET 3 18-19

* May test out as a result of Placement Testing.


## Program of Studies Leading to a Diploma

The explosion of technological jobs, across the country has left many companies short of an educated workforce. The student will obtain Networking knowledge and skill on the Microcomputer platform. The Networking Diploma prepares students for entry level positions as a Networking Specialist in a microcomputer environment.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester
Sem.-Hrs.

* OMT 119-Keyboarding 1

CIS 108 - Information Processing 3
CIS 110 - Introduction to Microcomputers with Microsoft Office 3
CIS 120 - PC Operating Systems with Microsoft Windows 3
CIS 180 - Networking and Communications 3
CIS 186 - Networking Concepts 3
ENG 101-English Composition $\underline{3}$

* May test out as a result of Placement Testing.


## OFFICE MANAGEMENT TECHNOLOGY

## Program of Studies Leading to a Diploma

## REQUIRED COURSES / RECOMMENDED SEQUENCE

## First Semester

Sem.-Hrs.
ENG 101- English Composition 3
OMT 109 - Word Processing Communications 3
OMT 125 - Beginning Typewriting or
OMT 126 - Intermediate Typewriting 3
CIS 110 - Introduction to Microcomputers with Microsoft Office

3
CIS 140 - Introduction to the Internet or
CIS 142 - Strategic Business Plans with the Internet or
CIS 240 - World Wide Web Concepts and Designs

## 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 <br> Sem.-Hrs.

*** NUR 221 - Physical Assessment 3

* NUR 226 - Perioperative Nursing Didactic 3
* NUR 227 - Perioperative Nursing Internship 3
** NUR 228 - Registered Nurse First Assistant 3 NUR 229 - RN First Assistant
** Clinical Internship/Self-Directed 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
Nursing TOTAL 16 credits

## RECORDING ENGINEER

## Program of Studies Leading to a Diploma

This curriculum is designed to give students basic and advanced concepts behind multitrack 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 | Sem.-Hrs. |
| :--- | ---: |
| MRT 110 - Basic Music Recording | 5 |
| CIS 107 - Computers for Mass Media | 3 |
| EET 125 - Electronics for Music Recording | $\underline{4}$ |
|  | 12 |
| Spring Semester | Sem.-Hrs. |
| MRT 220 - Advanced Music Recording | 3 |
| MRT 221 - Music Management | 3 |
| MRT 228 - Special Projects |  |
| Music Recording Workshop | $\underline{6}$ |
|  | 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 employees about newly acquired technical equipment in the workplace.

There are no specific enrollment requirements for any training activity offered through Continuing Education except those established by a sponsoring group or employer. College certificates indicating completion of training are presented to each client or employee who satisfies all training requirements.

## III. BUSINESS/INDUSTRY SPECIFIC TRAINING

Continuing Education, working with all components of the Economic and Community Development division, is also able to design customized training programs for employees in business and industry. Needs assessments can be conducted to determine exact training needs, and the division has a team of professionals who can develop a complete, strategic training plan for any employer who wants to train new employees or provide training upgrades to existing ones.

For those employers who have already targeted training needs, the divisional team will work with them to plan and implement a complete training activity either on campus or at the employers' site. The team also has access to State job training funds that may be available to help offset the cost of such training activities. In addition, parts or all of an existing College career curricular program can be adapted, if needed, to meet specific training needs.

## 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, understanding of interference, measurements and rhythms, and use of a Holter Monitor.

Students successfully completing this program will receive a Certificate of Achievement.

## 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 all the courses in this program will receive a Certificate of Achievement.

## PHLEBOTOMIST

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.

After completing the coursework, students will receive a Certificate of Achievement.

## PROFESSIONAL MIXOLOGIST/BAR MANAGER

Luzerne County Community College's Professional Mixology and Bar Management 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 48 -hour program is designed to prepare the student for a full-time or parttime 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 and will be equipped with the necessary skills to handle all areas and problems relative to bar operation. As part of the Professional Mixology program, each student will participant in the Pennsylvania Liquor Control Boardapproved 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. Training can be attained by taking individual courses or by completing a comprehensive training program. The Industrial Maintenance

Technician Training Program consists of 598 hours of training. To complete the IMT Certificate Program, students must complete the following courses:

Computer Basics
Blueprint Reading
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 consists of 96 hours of training, including 21 hours of classroom instruction, 21 hours of laboratory experience, and 54 hours of 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.

## 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.

## 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. Upon completion, you will be awarded a Certificate of Achievement plus 10.0 Continuing Education Units (CEUs).

## PROFESSIONAL TRUCK DRIVER

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 consists of 240 hours 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.

Integral 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.

## SURGICAL ASSISTANT

There is currently a demand for dedicated surgical assistants in hospitals throughout the community, as well as at hospitals and surgical practices nationwide. Surgical assistants (SAs) scrub for operative procedures, assist in the positioning of patients, and assist in the draping and preparation of the operative site. During procedures, the SA retracts and exposes the operative field and assists in securing the best possible exposure of the anatomical site. With experience, the SA learns to anticipate the moves and needs of the surgeon as the operative procedure progresses.

This course teaches you the basic principles, skills, and techniques essential to entry-level practice as a Surgical Assistant. Our comprehensive 180-hour program consists of 45 hours of classroom instruction/laboratory experience and 135 hours of clinical experience. Upon completion, you will be awarded a Certificate of Achievement plus 18.0 Continuing Education Units (CEUs).

## 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 149 -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

## 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 313)
College Reading and Study Skills ......................................... RDG 020 (see page 313)
Basic Writing Skills ................................................................ ENG 029 (see page 266)
Fundamentals of Writing ........................................................ ENG 030 (see page 266)
Pre-Technical Mathematics ................................................... MAT 040 (see page 293)
Basic Arithmetic Skills .......................................................... MAT 049 (see page 293)
Fundamentals of Arithmetic ................................................ MAT 050 (see page 293)
Fundamentals of Algebra ..................................................... MAT 060 (see page 294)
Elements of Science ................................................................... SCI 090 (see page 225)

## 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 195 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 53 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.

## COURSES BY DEPARTMENT

AUTOMOTIVE DEPARTMENT<br>Automotive 101 Basic Electricity<br>Technology 102 Anti-Lock Brake Traction Control<br>(AUT) 103 Automotive Fundamentals<br>105 Brake Systems and Chassis Repair<br>106 Steering and Suspension Systems<br>108 Transmission and Drive Systems Basic (RWD)<br>109 Power Plant Overhaul Theory<br>110 Heating and Air Conditioning Theory<br>111 Auto Trans Advanced (FWD)<br>112 Fuel Injection Systems<br>114 Diesel Fundamentals<br>115 Diesel Specialization<br>116 Carburetion and Computer Command Control Systems<br>117 Specialized Automotive Electronics<br>118 Ford Electronic Fuel Injection<br>119 Chrysler Electronic Fuel Injection<br>120 Electronic Fuel Injection Driveability<br>122 Oscilloscope \& Scan Tool Diagnosis<br>123 Distributorless Ignition Systems<br>124 Cylinder Head Rebuilding<br>128 Chassis Body Electrical<br>130 Manual Transmission 4WD<br>Motor 100 Basic Machine Shop Principles<br>Sports 101 Basic High Performance Engine Blueprinting<br>Technology 102 Introduction to Motorsports<br>(MST) 103 Advanced High Performance Engine Blueprinting<br>105 Fabrication/Welding I<br>106 Fabrication/Welding II<br>107 Introduction to Combustion/Fuel/Ignition<br>108 Computer Assisted Design<br>109 Chassis/Suspension/Brakes<br>110 Motorsports Safety<br>111 Cylinder Head Design/Fuel Management<br>112 Drive Line Systems<br>113 Rear Axle Assembly<br>114 Basic Bridgeport Operations<br>115 Fabrication/Welding III

## BUSINESS DEPARTMENT

Accounting 104 Financial Accounting for the Hospitality Industry
(ACC) 111 Principles of Accounting I
112 Principles of Accounting II
121 Applications in Microcomputer Accounting
211 Intermediate Accounting I
212 Intermediate Accounting II
213 Managerial Accounting
214 Tax Accounting
215 Cost Accounting
Business 101 Introduction to Business
(BUS) 105 Business Math
107 Math of Finance
151 Introduction to Health Care
152 Health Care Planning and Marketing
153 Financial Management for Health Care Managers
154 Health Care Management Topics
159 Internship - Health Care Management
161 Principles of Purchasing
164 Advanced Purchasing
165 Logistics
167 Introduction to Materials Management
172 Labor Relations
181 Introduction to International Business
182 International Marketing
183 International Logistics
184 Comparative International Political and Culture
201 Principles of Marketing I
202 Principles of Marketing II
203 Introduction to Sales
209 Business Communications
210 Introduction to Customer Service
229 Personal Money Management
231 Principles of Management
238 Pharmacology for the Medical Office Assistant
248 Small Business Management
251 Human Resource Management
253 First-Line Supervisory Principles
260 Legal Aspects For Health Professions
261 Business Law I
262 Business Law II
263 Office Management
265 Principles of Manufacturing and Distribution
Economics 151 Principles of Economics I
(ECO) 152 Principles of Economics II
251 Money \& Banking
Legal 100 Introduction to Paralegal Studies
Assisting 101 Legal Research
(Paralegal) 102 Legal Writing
(LAP) 201 Tort and Criminal Law

202 Estate Law
203 Corporate Law
204 Bankruptcy Law
205 Family Law
206 Civil Litigation for the Paralegal
279 Legal Assisting Internship
Real Estate 101 Real Estate Fundamentals
Management 102 Real Estate Practice
(RET) 107 Law and Real Estate Practices

| BROADCAST COMMUNICATIONS/ |
| :---: |
| JOURNALISM DEPARTMENT |

Music Recording 110 Basic Music Recording<br>Technology 120 Live Sound Reinforcement<br>(MRT) 121 Basic MIDI Theory and Sequencing<br>122 On-Location Recording<br>220 Advanced Music Recording<br>221 Music Management<br>222 Digital Audio Editing<br>228 Music Recording Workshop<br>229 Music Recording Internship

## COMMERCIAL ART

Commercial 119 Drawing I
Art 120 Drawing II
(CAR) 129 Color \& Design I
130 Color \& Design II
131 Sculpture I
132 Life Drawing I
133 Life Drawing II
201 Building a Brand
202 Creative Art Direction
203 Interactive Advertising
204 Salesmanship/Presentation
205 Advertising Campaign Design
218 Professional Painting Portfolio
220 Basic Photography
233 Illustration I
234 Illustration II
239 Portrait Painting
240 Advanced Photography
241 Graphic Design I
242 Graphic Design II
243 Materials and Techniques of Painting
244 Graphic Production
245 Typography
256 Still Life Painting
257 Animal Painting
258 Landscape Painting
259 Learning From the Old Masters
260 Color Photography I
261 Independent Study I
262 Airbrush I
263 Airbrush II
264 Photo Lighting and Theory of Composition
265 Portrait and Wedding Photography
266 Color Photo II
267 Photojournalism I
268 Nature Photography
269 Photojournalism II
270 Photo Portfolio and Professional Development
271 Photo Studio and Lab I

272 Photo Studio and Lab II
275 Digital Photography
276 Publication Design
277 Photo Image Enhancement
278 Painting with the Computer
279 Presentation Graphics and Professional Portfolio Development
280 Independent Study II
281 Internship
283 Advanced Publication Design
286 Mounting, Matting, and Framing
291 Computer Animation
293 Web Page Design
294 Advanced Web Presentation
295 Multimedia For The Web

## COMPUTER INFORMATION SYSTEMS/ OFFICE MANAGEMENT TECHNOLOGY

| Computer | 104 Hospitality Computer Applications |
| ---: | :--- |
| Information | 105 Travel Computer Applications |
| Systems | 106 Computers in Industry |
| (CIS) | 107 Computers for Mass Media |
|  | 108 Information Processing |
|  | 110 Introduction to Microcomputers with |
|  | Microsoft Office |
|  | 111 Word Processing with Microsoft Word |
|  | 112 Spreadsheet Analysis using Microsoft Excel |
|  | 116 Presentation Design with Microsoft Powerpoint |
|  | 120 PC Operating Systems with Microsoft Windows |
|  | 140 Introduction to the Internet |
|  | 142 Strategic Business Plans with the Internet |
|  | 146 Client Side Web Development I |
|  | 148 Database Design with SQL |
|  | 150 RPG IV Programming I |
|  | 152 Structured Programming with COBOL |
|  | 156 Programming with JAVA |
|  | 158 Object-Oriented Programming with C++ |
|  | 160 Programming with Visual Basic |
|  | 162 Programming with Visual Basic.NET |
|  | 170 Management Information Systems |
|  | 172 System Analysis and Design |
|  | 180 Networking and Communications |
| 186 Networking Concepts |  |
| 213 Desktop Publishing |  |
| 240 World Wide Web Concepts and Designs |  |
| 242 Advanced Web Page Design |  |
| 246 Client Side Web Development II |  |
| 250 RPG IV Programming II |  |

252 Intermediate COBOL
258 Advanced C++ Programming
260 Advanced Programming with Visual Basic
263 Internet Active Server Pages Programming with Visual Basic
266 Internet Programming with JAVA
268 Server Administration with Linux
290 Computer Information Systems Projects
291-298 Upgrading Computer Software Skills
299 Computer Information Systems Internship
Court 099 Supplemental Skillbuilding
Reporting/ 110 Verbatim I
Captioning 111 Verbatim II(CRC) 112 Verbatim III
113 Verbatim IV
114 Verbatim V
115 Verbatim VI
120 English For Court Reporters
130 Court Reporting Technology I
211 Medical Reporting
212 Multiple Speaker
220 Realtime Reporting Procedures
230 Court Reporting Technology II
299 Court Reporting/Captioning Internship
Office 109 Word Processing Communications
Management 119 Keyboarding
(OMT) 125 Beginning Typewriting
126 Intermediate Typewriting
130 Medical Terminology I
133 Medical Office Procedures I
135 Reimbursement Methodologies
147 Legal Terminology and Transcription
154 Office Procedure I
230 Medical Terminology II
233 Medical Office Procedures II
234 Medical Transcription I
235 Medical Transcription II
238 CPT Coding/Insurance Billing
239 ICD-9CM Coding
254 Office Procedures II
299 Office Application Specialist Internship

## DENTAL HEALTH DEPARTMENT

| Dental | 101 Chairside Dental Assisting I |
| ---: | :--- |
| Assisting | 102 Dental Anatomy |
| (DAS) | 103 Dental Materials |
| 104 Dental Specialties |  |
| 111 Chairside Dental Assisting II |  |
| 112 Dental Radiology |  |
| 113 Dental Practice Management |  |
| 114 Dental Assisting Clinical Practice |  |
| 289 Expanded Functions Dental Assistant Foundation |  |
| 290 Dental Assisting Expanded Functions I |  |
| 291 Dental Assisting Expanded Functions II |  |

Dental 101 Dental Hygiene Seminar I
Hygiene 102 Dental Hygiene Clinic I
(DHY) 103 Oral Histology \& Embryology
104 Dental Anatomy
105 Dental Radiology
111 Dental Hygiene Seminar II
112 Dental Hygiene Clinic II
113 Periodontics I
114 Dental Materials
115 Nutrition \& Oral Health
122 Advanced Dental Hygiene Procedures
201 Dental Hygiene Seminar III
202 Dental Hygiene Clinic III
203 Dental Health Education
204 Dental Pharmacology
205 Oral Pathology
206 Periodontics II
211 Dental Hygiene Seminar IV
212 Dental Hygiene Clinic IV
213 Community Dental Health
220 Dental Hygiene Practicum

## DEVELOPMENTAL COURSES

Developmental RDG 019 Basic Reading Skills
Courses RDG 020 College Reading and Study Skills
ENG 029 Basic Writing Skills
ENG 030 Fundamentals of Writing
MAT 040 Pre-Technical Mathematics
MAT 049 Basic Arithmetic Skills
MAT 050 Fundamentals of Arithmetic
MAT 060 Fundamentals of Algebra
SCI 090 Elements of Science

## EMERGENCY MEDICAL SERVICES

Emergency 101 Basic Emergency Medical Technician<br>Medical 103 Basic Pharmacology<br>Services 201 Emergency Medical Technician Paramedic Part A<br>(EMS) 202 Emergency Medical Technician Paramedic Part B<br>203 Emergency Medical Technician Paramedic Part C<br>204 Introduction to Emergency Medical Systems<br>205 Advanced Paramedic Practice<br>206 Scuba<br>207 Cardiopulmonary Resuscitation (C.P.R.)<br>208 Phase I Water Rescue<br>209 Emergency Vehicle Operations<br>210 Basic Trauma Life Support<br>211 Advanced Cardiac Life Support<br>212 Pediatric Advanced Life Support<br>Public Safety 101 Basic Telecommunicator (Part A)<br>Communications 102 Basic Telecommunicator (Part B)<br>(PSC) 103 Specific Dispatching<br>104 Emergency Medical Dispatch<br>105 National Crime Information Center/Commonwealth Law Enforcement Assistance Network (NCIC/CLEAN)<br>106 Basic Public Safety Communications Internship

## ENGLISH DEPARTMENT

English 029 Basic Writing Skills
(ENG) 030 Fundamentals of Writing
101 English Composition
102 Advanced Composition
104 Writing About Literature
120 Critical Analysis of Literature
221 Literature of the Western World I
222 Literature of the Western World II
223 American Literature I
224 American Literature II
225 British Literature I
226 British Literature II
227 Shakespeare
229 Short Story
233 Poetry
242 Modern Drama
251 Creative Writing
261 Technical Communications
Theatre 100 Introduction to Theatre
(THR) 101 Acting I
105 Script Analysis
201 Acting II

## FIRST YEAR EXPERIENCE

First Year 101 First Year Experience
Experience
(FYE)

## HEALTH, PHYSICAL EDUCATION AND MOVEMENT SCIENCES

Health and FLS Fitness Lifestyles
Physical Education 104 Dynamic Yoga
(HPE) 106 Circuit Weight Training
107 High/Low Aerobic Dance
111 Bowling
113 Badminton \& Golf
114 Tennis \& Badminton
115 Active Living Everyday
118 Fencing
121 Aerobics Step Training
122 Fitness for Life: An Individualized Approach
124 Cardio Sculpt
125 Group Exercise Strength Training \& Flexibility
126 Group Exercise, Choreography, and Class Design
127 Hatha Yoga
128 Introduction to Exercise Physiology
129 Strength and Conditioning
130 Nutrition for Wellness
131 Beginning Golf
132 Basic Martial Arts
141 Volleyball
151 Planning \& Organization for Physical Education
152 Introduction to Physical Education
153 Elementary School Physical Education
154 Safety \& First Aid
155 Personal Health
160 Introduction To Nutrition
201 Personal Training I - Fitness Assessment and Fitness Equipment
220 Voices in Sport and Society
230 Badminton
231 Advanced Bowling
234 Tennis
242 Advanced Basketball
244 Coaching of Sport
246 Officiating of Sport
247 Fitness and Wellness
248 Human Sexuality
249 Conditioning and Weight Training for Women
262 Internship

## HOTEL AND RESTAURANT DEPARTMENT

Culinary 102 Pantry and Cold Food Production<br>Arts 103 Meat Analysis and Preparation<br>(CUL) 104 Fruit and Vegetable Preparation<br>105 Soup and Sauce Analysis/Production<br>106 Baking Techniques and Analysis<br>108 Food Sanitation and Safety<br>110 Fish and Seafood Analysis and Production<br>Hotel/ 101 Fundamentals of Food<br>Restaurant 105 Food Sanitation and Safety<br>Management 109 Nutrition and Menu Planning<br>(HRM) 122 Food Purchasing<br>126 Quantity Food Preparation<br>130 Hotel and Restaurant Operations<br>132 Property Management \& Housekeeping<br>134 Management in the Hospitality Industry<br>140 Professional Food Service<br>211 Layout of Food Service Equipment<br>212 Hospitality Law<br>213 Beverage Operations<br>215 Marketing for the Hospitality Industry<br>217 Meat Analysis<br>228 Management Financial Analysis and Planning<br>260 Hotel \& Restaurant Work Experience Practicum<br>Pastry 101 Introduction to Pastry Arts/Breads<br>Arts 102 The Art of Pastry<br>Management 103 Basic Cakes and Cake Decoration<br>(PAS) 104 Plated Desserts, Creams, Puddings, Dessert Sauces<br>105 Tortes and Specialty Cakes<br>106 Chocolates and Decorative Baking<br>(CIS) 104 Hospitality Computer Applications<br>105 Travel Computer Applications

## MATHEMATICS DEPARTMENT

Computer 230 Elementary Data Structures
Science
(COS)
Mathematics 040 Pre-Technical Mathematics
(MAT) 049 Basic Arithmetic Skills
050 Fundamentals of Arithmetic
060 Fundamentals of Algebra
101 Survey of Mathematics I
103 Applied Math for Industry
105 Intermediate Algebra
109 Mathematics for Elementary Teachers I

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1 1 0 \text { Mathematics for Elementary Teachers II}
1 0 7 \text { Basic Statistics}
1 1 1 ~ T e c h . ~ M a t h . ~ I ~
1 1 2 \text { Tech. Math. II}
1 2 1 \text { College Algebra}
1 2 2 ~ P l a n e ~ T r i g o n o m e t r y ~
1 2 5 \text { College Algebra \& Trigonometry}
1 4 0 \text { Calculus for Business \& The Social Science}
1 5 1 \text { Analytic Geometry \& Calculus I}
251 Analytic Geometry & Calculus II
252 Analytic Geometry & Calculus III
2 6 0 \text { Discrete Mathematics}
2 7 5 \text { Linear Algebra}
2 7 9 \text { Differential Equations}
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NURSING DEPARTMENT
Nursing 101 Introduction to Nursing in the Health Care System
(NUR) 102 Nursing Within the Life Cycle
124 Introduction to Issues in Nursing
125 Transition into Nursing
130 Calculating for Medication Administration
203 Nursing Care of Clients with Acute and
Chronic Health Problems
204 Nursing Care of Clients with
Complex Health Problems
220 Pharmacology/Pathophysiology for
Health Care Professionals
221 Physical Assessment
224 Nursing in Society
226 Perioperative Nursing Didactic
227 Perioperative Nursing Internship
228 Registered Nurse First Assistant
229 RN First Assistant-Clinical Internship/Self-Directed
RESPIRATORY THERAPY

Respiratory 105 Orientation to Respiratory Therapy
Therapy 111 Fundamentals of Respiratory Therapy I
(RTT) 112 Fundamentals of Respiratory Therapy II
121 Applications and Procedures of
Respiratory Therapy I
131 Clinical Practicum I
150 Respiratory Therapy Pharmacology
222 Applications and Procedures of
Respiratory Therapy II
225 Pulmonary Function
226 Neonatal and Pediatric Respiratory Care
232 Clinical Practicum II

## SCIENCE DEPARTMENT

Biology 101 Introduction to Biological Science I<br>(BIO) 102 Human Genetics \& Ecology (Introduction to Biological Science II)<br>120 Anatomy/Artists<br>121 General Biology I<br>122 General Biology II<br>125 Basic Human Anatomy \& Physiology<br>130 Basic Anatomy<br>135 Anatomy \& Physiology I<br>136 Anatomy \& Physiology II<br>160 Principles of Environmental Science<br>222 Botany<br>251 General Microbiology<br>299 Special Projects General Biology<br>Chemistry 111 Fundamentals of Chemistry<br>(CHE) 112 Fundamentals of Organic Chemistry<br>131 Principles of Chemistry I<br>151 General Chemistry I<br>152 General Chemistry II<br>175 Chemistry for Health Science<br>251 Organic Chemistry I<br>252 Organic Chemistry II<br>299 Special Topics<br>Horticulture 101 Fundamentals of Horticulture<br>(HRT) 102 Horticulture Soils<br>104 Herbaceous Plants<br>105 Woody Plants I<br>106 Woody Plants II<br>107 Greenhouse Production I<br>109 Floral Design I<br>111 Floral Design II<br>113 Plant Propagation<br>115 Plant Insects and Diseases<br>201 Greenhouse Production II<br>205 Interior Plantscaping<br>214 Nursery/Garden Center Management<br>216 Arborculture, Intro to Principles \& Practice<br>220 Landscaping Principles \& Practice<br>222 Landscape Architectural Design<br>290 Internship<br>Physics 101 Introduction to Physical Science I<br>(PHY) 102 Earth-Space Science (Introduction to Physical Science II)<br>103 Physics for the Trade Technologies<br>110 Introduction to Physical Geology<br>111 Descriptive Astronomy<br>112 Basic Meterology, Weather \& Climate

121 Technical Physics (Mechanical)
123 Technical Physics I
124 Technical Physics II
131 General Physics I
132 General Physics II
151 Calculus-Based Physics I
152 Calculus-Based Physics II
General Science 090 Elements of Science(SCI)
SOCIAL SCIENCE-HISTORY DEPARTMENT
Criminal 130 Introduction to Criminal Justice
Justice 132 Criminal Investigation
(CJU) 139 Survey of Drugs
140 Criminal Law
141 Delinquency and Juvenile Justice
215 Cyber Crime
233 Introduction to Law Enforcement
235 Police Patrol Operations
238 Police Personnel Management \& Supervision
242 Police-Community Relations
243 Introduction to the Correctional System
245 Crime and Criminology
250 Practicum
257 Criminal Procedure
259 Victimology
260 Introduction to Security
Early 100 Introduction to Early Childhood Education
Childhood 101 Infants and Toddlers
Education ECR Early Childhood Regulations
(CHD) 201 Children's Music and Movement
202 Children's Art
203 Children's Literature
204 Children's Science and Math
205 Health, Safety and Nutrition
207 Young Children in Society
208/PSY 204 Child Psychology
210 Children with Disabilities
216 Early Childhood Program Management
220 Field Work in Early Childhood Education I
221 Field Work in Early Childhood Education II
Education 150 Introduction to Education
(EDU) 151 Instructional Technology
251 Curriculum
261 Teaching
271 Classroom Management

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Geography }111\mathrm{ World Physical Geography
    (GEO) }112\mathrm{ World Cultural Geography
    History 101 Western Civilization I
        (HIS)}102\mathrm{ Western Civilization II
            1 1 0 \text { Introduction to African-American History}
            2 0 1 \text { American History to } 1 8 6 5
            202 American History Since 1865
            2 0 5 \text { American Civil War}
            231 Luzerne County History
            2 3 8 \text { World War II}
            240 The Holocaust
            250 American Civil Rights Movement
            252 Women in American History
            258 Introduction to Asian History
            2 5 9 ~ V i e t n a m ~
            260 The Korean War
            Human 101 Introduction to Human Services
            Services }102\mathrm{ Interviewing & Communication Skills
            (HMS) 201 Introduction to Counseling
            205 Agency Procedures & Legislation
            206 Group and Family Dynamics
            2 0 7 \text { Psychiatric Disorders in Children}
                    and Adolescents
                    2 1 0 \text { Human Services Management Module}
                    2 2 0 \text { Field Work I}
                            2 2 1 ~ F i e l d ~ W o r k ~ I I ~
                            2 2 2 \text { Substance Abuse Counseling}
                            Political 101 American Government
        Science 212 State & Local Government
        (POS)
Psychology 103 General Psychology
            (PSY) }204\mathrm{ Child Psychology
                    210 Educational Psychology
                    2 1 3 \text { Abnormal Psychology}
                    2 1 7 \text { Developmental Psychology}
                    Sociology 103 Introduction to Women's Studies
            (SOC) }110\mathrm{ Issues in American Diversity
            2 1 5 \text { Principles of Sociology}
            216 Contemporary Social Issues
            217 The Family
            2 1 8 \text { Anthropology}
            2 1 9 \text { Introduction to Gerontology}
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# SPEECH, PHILOSOPHY \& FINE ARTS DEPARTMENT 

Art 110 Art Appreciation<br>(ART) 150 The Creative Spirit in Modern and Contemporary Art<br>200 The Movies<br>French 101 Elementary French I<br>(FRE) 102 Elementary French II<br>201 Intermediate French I*<br>202 Intermediate French II*<br>Music 150 Music Appreciation<br>(MUS)<br>Philosophy 150 Introduction to Philosophy<br>(PHI) 151 Introduction to Ethics<br>152 Life, Death and Dying<br>Reading 019 Basic Reading Skills<br>(RDG) 020 College Reading and Study Skills<br>120 Reading for Comprehension and Speed<br>Spanish 101 Elementary Spanish I<br>(SPA) 102 Elementary Spanish II<br>201 Intermediate Spanish I*<br>202 Intermediate Spanish II*<br>Speech 125 Fundamentals of Speech<br>(SPE) 150 Oral Interpretation<br>200 Group Discussion<br>210 Intro. to Interpersonal Communications<br>226 Advanced Speech<br>* Independent Study, with credit, by arrangement with professor.

SURGICAL TECHNOLOGY

Operating 101 Surgical Room Technology I<br>Room 102 Basic Surgical Intervention<br>Technology 103 Complex Surgical Intervention<br>(SUR) 104 Advanced Topics for Surgical Technology<br>105 Surgical Pathology<br>106 Pharmacology for Surgical Technology

## TECHNOLOGY DEPARTMENT

Architectural 110 Architectural Design Graphics IEngineering 112 Architectural Drafting ITechnology 114 Building Materials \& Construction(ARC) 175 Architectural Design Graphics II
191 Architectural History I
192 Architectural History II
205 Architectural Design Fundamentals I
210 Architectural Design Fundamentals II
212 Mechanical Equipment
213 Surveying
215 Structural Analysis I
216 Structural Analysis II
219 Estimating \& Architectural Practice
226 Advanced Architectural Drafting
290 Architectural Engineering Technology Practicum
Automated 103 CNC Machining I
Manufacturing 104 CNC Machining II
SystemsTechnology(AMT)
Automated 101 Introduction to Automated Systems/Robotics
Systems/Robotics 203 Programmable Controllers
(ASR) 205 Electromechanical Devices
207 Fluid Power Applications
Aviation 101 Aeronautical Knowledge I
(AVI) 103 Aeronautical Knowledge II
105 Flight Theory
107 Air Transportation
109 Instrument Flight Theory
201 Federal Aviation Regulations/Aviation Law
204 Aviation Operations Management
205 Commercial Pilot Theory
207 Multi-Engine Flight Theory
209 Aviation Weather
211 Aerodynamics
213 Physiology/Psychology of Flight
250 Private Pilot Practical
252 Instrument Flight Practical
254 Commercial Pilot Practical I
255 Commercial Pilot Practical II
256 Multi-Engine Flight Practical
Computer 201 Materials and Testing
Aided Drafting 203 Computerized Advanced Drafting
and Design 204 Computerized Design Problems(CDT)

| Computer 101 Computer Assisted Design I |  |
| :---: | :---: |
| Assisted | 102 Computer Assisted Design II |
| Design(CAD) |  |
| Computer 103 PC Operating Systems Technology |  |
| Systems | 105 Microcomputer Architecture \& Multimedia System |
| Technology 215 Data Communications |  |
| (CST) | 220 Networking Security Issues |
|  | 221 Personal Computer Security |
|  | 225 Systems Networking |
|  | 227 Linux/Unix Operating System |
|  | 230 TCP/IP and Network Routers |
|  | 232 Forenics Analysis in a Windows Environment |
| Electronics 120 Electrical Theory |  |
| Engineering | 125 Electronics for Music Recording |
| Technology | 131 D.C. Electricity |
|  | 132 A.C. Electricity |
|  | 135 Electronic Devices |
|  | 201 Electronic Amplifier Circuits |
|  | 205 Digital Circuits |
|  | 224 Electronic Communications |
|  | 226 Microprocessors |
|  | 228 Industrial Electronics and Process Control |
| Electrical | 101 D.C. and A.C. Fundamentals |
| Construction (CEL) | 103 Basic Construction Wiring |
|  | 112 Advanced Electrical Construction |
|  | 116 National Electrical Code I |
|  | 119 National Electrical Code II |
|  | 120 Electric Motors |
|  | 121 Electric Motor Control I |
|  | 122 Electric Motor Control II |
|  | 123 National Electrical Code III |
|  | 130 Power Systems |
|  | 132 Transformers |
| Fire | 101 Introduction to Fire Protection and Prevention |
| Science | 111 Fire Service Management |
| Technology | 112 Fire Protection System |
|  | 121 Fire Fighting Tactics and Strategy |
|  | 201 Building Codes and Construction |
|  | 202 Hazardous Materials |
|  | 203 Principles of Inspection |
|  | 251 Fire Investigation and Arson |
|  | 255 Fire Service Hydraulics |
|  | 259 Hydraulics II |
| General | 107 Electronic Drafting for Engineering Technology |
| Engineering | 109 Blueprint Reading \& Estimating |
| Technology | 112 Industrial Safety |
| (GET) | 113 Technical Drafting |

118 Descriptive Geometry
121 Manufacturing Processes I
122 Manufacturing Processes II
123 Technical Mechanics
234 Introduction to Computer Programming
252 Introduction to Nanofabrication Processing
Heating 101 Basic Heating and Cooling Technologyand 103 Warm Air Heating \& Air Conditioning
Cooling Design/Installation(HAC)
Interior Design 120 Materials \& Methods for Interior Design
Technology 135 Introduction to Interior Design
(INT) 225 Interior Design Studio I
230 Interior Design Studio II
290 Interior Design Practicum
Kitchen and Bath 120 Kitchen \& Bath Equipment and Materials
Design Technology 220 Kitchen \& Bath Design, Drafting and Presentation(KBD) 225 Kitchen\& Bath Design Studio I
230 Kitchen \& Bath Design Studio II
Plumbing 101 Plumbing \& Heating I
and 102 Plumbing \& Heating II
Heating 105 Controls for Heating Systems
Technology 108 Blueprint Reading and Estimating for(PLH) the Plumbing and Heating Technologies
112 Basic Plumbing and Heating Systems
114 Advanced Plumbing Systems and Design
118 Basic Heating Technology
120 Heating Systems Design and Installations
128 PLH Code
222 Advanced Heating Technology
224 Mechanical Heating Code
230 Internship
232 Internship
Nanofabrication 211 Safety and Equipment Overview for Manufacturing Nanofabrication
Technology 212 Basic Nanofabrication Processes
(NMT) 213 Thin Films in Nanofabrication
214 Lithography for Nanofabrication
215 Materials Modification in Nanofabrication
216 Characterization, Packaging and Testing of Nanofabricated Structures
Nuclear 101 Introduction to Reactor Plant Systems
Engineering 104 Nuclear Instrumentation and Controls
Technology 203 Atomic \& Nuclear Physics
(NET) 204 Automatic Process Control
205 Fundamentals of Health Physics
206 Reactor Core Fundamentals
208 Human Performance Technology/Error Avoidance

## COURSE DESCRIPTIONS

## 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. (Spring only)
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 - <br> 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 lightframe 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 <br> 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.

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 <br> 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.
Corequisite: MAT 111.
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 <br> 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.
Prerequisites: PHY 121, EET 120.
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.
Prerequisite: PHY 121.

## 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 <br> 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.

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 4 WD transfer case.
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## 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) <br> 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) \$5,423.83
Cost includes: 35 hours of Aircraft Rental
25 hours of Dual Flight Instruction
16.5 hours of Ground Instruction

Course Materials
FAA Written Exam Fee
FAA Practical Exam Fee
State Sales Tax
AVI 252-Instrument Flight Practical
Estimated cost to student (subject to change)
Cost includes: 38 hours of Aircraft Rental
35 hours of Dual Flight Instruction
11 hours of Ground Instruction
Course Materials
FAA Written Exam Fee
FAA Practical Exam Fee
State Sales Tax
AVI 254-Commercial Pilot Practical I
Estimated cost to student (subject to change)
\$ 8,625.42
Cost includes: 70.5 hours of Aircraft Rental
28 hours of Dual Flight Instructio
13.5 hours of Ground Instruction

Course Materials
State Sales Tax

Cost includes: 30 hours of Aircraft Rental
19.5 hours of Complex Aircraft Rental

29 hours of Dual Flight Instruction
10.5 hours of Ground Instruction

Course Materials
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 <br> BIO 101-Introduction to Biological Science I <br> 3 Sem.-Hrs. <br> 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 <br> 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 utili-
zation 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 <br> 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 <br> 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 <br> 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.

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 <br> 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 <br> 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 151-Introduction to Health Care
3 Sem.-Hrs.
A review of the principles of management of health care institutions. The course will consider the role of government in health care, health care terminology, and problems of personnel involved in health care services. Specific problems in health care facilities will be examined in detail. Same course as HCM 101; duplicate credit not possible.
BUS 152-Health Care Planing and Marketing
3 Sem.-Hrs.
The concept of long range planning for health care facilities will be introduced. The acquisition of data, analysis, goal setting, and implementation of strategic planning will be included. A special project starting from the development stage to final approval by an appropriate agency will be presented. Same course as HCM 102; duplicate credit not possible.

## BUS 153-Financial Management for Health Care Managers 3 Sem.-Hrs.

The concept of reimbursement is provided with emphasis on the basis of the health care system of costs, budgets, role of the financial officer and detailed preparation and interpretation of costs reports. Same course as HCM 103; duplicate credit not possible.
BUS 154-Health Care Management Topics -(non-transfer students only)

3 Sem.-Hrs.
This course will analyze the proper use of resources available to health care facilities. An analysis of proper work methods designed to control costs, maximize efficiency and improve work quality will be considered. Same course as HCM 104; duplicate credit not possible.

## BUS 159-Internship - Health Care Management

3 Sem.-Hrs.
Students will be assigned to a health care facility to gain on-the-job experience. Supervisors at the health care facility will coordinate the students' activities to assure valuable learning experience. One major project should be completed as a basis for grading. Same course as HCM 280; duplicate credit not possible.

## 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.

Basic managerial techniques and decision-making. Purchasing procedures and systems relative to material management through utilization of detailed case studies.

## Prerequisite: BUS 161.

## 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 172-Labor Relations

3 Sem.-Hrs.
History of the labor movement; structure and operations of labor organizations; collective bargaining, contract negotiations and the labor agreement; handling grievances; the role of government in labor relations; and current issues and labor problems.
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 182-International Marketing

3 Sem.-Hrs.
An introduction to international marketing with special emphasis on international competition. The current distribution system including pricing and credit policies, promotional methods including advertising are examined. Trade barriers, trade agreements and the political, legal, cultural, ethical strategies are offered in detail. Same course as INB 102; 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 184-Comparative International Political and Culture <br> 3 Sem.-Hrs.

A study of the international political and culture of the major marketing areas of the world is presented not only to the student of international business but also to non-majors to acquaint them with the challenges of the global market. The culture of various countries is examined and compared to other environments. Same course as INB 104; duplicate credit not possible.

## BUS 201-Principles of Marketing I

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 202-Principles of Marketing II
3 Sem.-Hrs.
Principles of marketing and their application will be studied; emphasis will be placed on problem solving by use of the case method.
Prerequisite: BUS 201.
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 necesssary 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 <br> 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 governmental and social influences is given. The short incidents and role play are utilized as significant educational tools. (Spring only)

## BUS 260-Legal Aspects for Health Professions <br> 3 Sem.-Hrs.

To review the major laws which relate to personnel in the health fields. It is designed for personnel who are, or will be employed, in the health profession.

## BUS 261-Business Law I <br> 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 265-Principles of Manufacturing and Distribution 3 Sem.-Hrs.

This course examines the twin roles of manufacturing and distribution in our industrial and business economy. Physical control of both raw materials and finished products. Distribution of finished product, warehousing and types of distribution via wholesalers, agents, and distributor to final destination.

| CHEMISTRY |  |
| :--- | :---: |
| CHE 111-Fundamentals of Chemistry |  |

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 112-Fundamentals of Organic Chemistry

3 Lect., 3 Sem.-Hrs.
This one-semester course is primarily designed as a terminal course for students in nutritional and medical fields where a basic understanding of organic chemical reactions is the only requirement. Reaction mechanisms will not be emphasized. Therefore, this course should not be considered as a sufficient preparation for chemical, pharmacological or more advanced medical fields.
Prerequisite: Secondary school chemistry or algebra or placement by exam.

## 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 stoichiometry, 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 175-Chemistry for Health Sciences

4 Lect., 4 Sem.-Hrs.
A comprehensive course designed to review the essentials of general, organic and basic biochemistry; emphasis is placed on proteins, carbohydrates, lipids and some biochemical pathways. Enzymes are given special attention as to their role in health and disease.

## 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.

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 <br> 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 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-Interactive 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.

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-Advertising Campaign Design 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
3 Sem.-Hrs.
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 skills needed to work in an advertising agency as well as theory of various methods of production. Pasteups of simple and complex mechanicals are executed. Students learn theory and specifications of type, various stages from concept in design to mechanical and graphic steps needed to prepare for printing.

## 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 processes. Negative and transparency processing, along with color printing, will enable the student to develop sufficient technical skills necessary to record "quality" images. The subjective definition of a "quality" image will be explored through class discussions and assignments. Access to a manually adjustable 35 mm camera is required.
Prerequisite: CAR 220.

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 <br> 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 35 mm 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. Experience with studio lighting, medium format, and large format cameras is required for this class. This course provides students the opportunity to: scan at various resolutions using multiple film formats; use, creatively, a single shot digital camera in the studio; use, creatively, a scanning back camera in the studio; and produce professional quality images using digital files and digital printers.
Prerequisites: CAR 271, CIS 106
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.

## Section 01-Graphic Design and Computer Graphics, Section 02Photography, Section 03-Graphic Communications/Printing Technology and Printing Design and Production.

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 <br> 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.
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-Information Processing

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 "industry standard" software packages in word processing, spreadsheets, databases, presentation software, etc. It is not intended to teach the student programming, but to furnish a general knowledge of how a computer works using a "hands-on" approach. This is a first course that other CIS courses require as a prerequisite. Formerly IST 209, students cannot get duplicate credit.

## Prerequisite: OMT 119 or placement by exam.

CIS 111-Word Processing with Microsoft Word 3 Sem.-Hrs.
A study and application course using the current word processing program to create, edit and format documents and tables. Editing features may include find and replace, move and copy, hypertext links, proofing tools, and integrating information from the internet and other programs. Students will create mail merge documents and address databases. Formerly BUS 256, students cannot get duplicate credit. Corequisite: OMT 119 or placement by exam.
CIS 112-Spreadsheet Analysis using Microsoft Excel
3 Sem.-Hrs.
This hands-on course is designed to provide students with experience in solving real life business problems using the graphical spreadsheet application program "Microsoft Excel." The course covers all aspects of electronic spreadsheets from the simple techniques of planning, creating and printing worksheets, using functions and formulas, creating and printing charts and graphics, and includes advanced features such as multiple worksheets, using Excel's data management features, performing data analysis, and developing custom worksheets. Formerly IST 264, students cannot get duplicate credit.

## Prerequisite: CIS 110.

## CIS 114-Database Analysis using Microsoft Access

3 Sem.-Hrs.
This hands-on course is designed to provide students with the concepts of relational database management systems and experience in solving real life business data management problems using the Windows based relational database management system "Microsoft Access." The course covers all aspects of relational databases such as creating and maintaining tables, sorting, querying, and printing. Also included are such advanced topics as designing customized data entry forms and reports. Formerly IST 270, students cannot get duplicate credit.
Prerequisite: CIS 110.

## CIS 116-Presentation Analysis with Microsoft Powerpoint 3 Sem.-Hrs.

This hands-on course is designed to provide students with experience in the powerful presentation graphics program "Microsoft PowerPoint". The student will learn how to structure, design and present information to an audience. The student will learn how to deliver PowerPoint presentations using printed handouts, overhead transparencies and the most popular electronic slide show.

## CIS 120-PC Operating Systems with Microsoft Windows 3 Lect., 3 Sem.-Hrs.

Students will learn some of the most important topics about Windows XP Professional, including customizing Windows XP, implementing shortcut strategies, using OLE technologies, backing up a hard disk, safeguarding your computer, evaluating system performance, installing software, installing and troubleshooting hardware, and exploring the Windows Registry.
Prerequisite: CIS 110.

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. Formerly IST 102, students cannot get duplicate credit.

## CIS 142-Strategic Business Plans with the Internet 3 Sem.-Hrs.

The course is designed to introduce the process of using the Internet for research with a special emphasis on the Internet's strategic value for the business world. Because the Internet is one of the most powerful communication and information resources in existence today, it is encountered in all areas of business everywhere. Nearly all higher level educational institutions, businesses, governmental agencies, and industries use the Internet to communicate with one another, carry out research, transfer files, and connect to computers to access programs not available on their own computers. Using a hands-on approach, students will learn what is available on the Internet and how to perform business related functions efficiently and effectively on-line. Useful and appealing Web Site presentations will be created using HTML and employing software packages designed to convert information to HTML. The ability to access and navigate the Internet as well as create web pages will provide the students with an opportunity not only to expand their knowledge but also their perspective in an increasingly changing computer based marketplace. Formerly IST 235, students cannot get duplicate credit.
Prerequisite: CIS 110.

## 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.
Co-requisites: CIS 110 or permission of Department Chair

## 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
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

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 <br> 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. Formerly IST 218, students cannot get duplicate credit.
CIS 156-Programming with JAVA
3 Sem.-Hrs.
The purpose of this course is to guide students in using Java to write standalone applications and applets to be run by a Java enabled Web Browser. 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 working with objects, threads, event-driven user interfaces, database access via SQL and JDBC, and miscellaneous other topics.
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. Formerly IST 284, students cannot get duplicate credit.

## Prerequisite: Prior programming course or programming experience required with departmental approval.

## CIS 160-Programming with Visual Basic

 3 Sem.-Hrs.Students will be introduced to Microsoft Windows programming through handson experience. Upon successful completion of this course, students will be able to create their own stand-alone Windows application. Programming Microsoft Windows will teach programming concepts through Visual Basic for Windows. The course will cover the creation of Windows controls (buttons, scroll bars, etc.) as well as the addition of custom written third party controls. Creation of windows, dialog boxes, and pull down menus will be covered. "Attaching" code to these controls will be covered extensively. Formerly IST 292, students cannot get duplicate credit.

## CIS 162-Programming with Visual Basic.NET

3 Sem.-Hrs.
This course provides an introduction to Visual Basic.NET. Topics include the Visual Basic.NET Integrated Development Environment, building an application in the Visual Basic.NET environment and working with variables, constants, data types, and expressions. Students also learn about decision making, looping and
multiple forms, using menus, common dialogs, procedures, functions and arrays, debugging, creating executable files, and distributing a Windows application.

## CIS 170-Management Information Systems <br> 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.
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. Formerly IST 220, students cannot get duplicate credit.
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.
Most workers in business or technical environments are asked to produce informational materials and at times perform as presenters. Thus it is important to be able to create effective publications and presentations. To do this, a personal computer and software programs are needed to develop quality printed material or slides that merge text (words, heading, titles) and graphics (pictures, illustrations, graphs). In Desktop Publishing, students are taught production and presentation tools as they develop skills to create interesting layouts. Business documents such as newsletters, advertisements, price lists, brochures, reports, business cards, flyers, resumes, memos, stationery, invitations, manuals, announcements, and slide presentations are created and constructed. The Internet will be utilized to find, and retrieve information, graphics, documents and fonts necessary for understanding or project completion. Formerly IST 289, students cannot get duplicate credit. Prerequisite: CIS 110.

## CIS 240-World Wide Web Concepts and Designs

3 Sem.-Hrs.
In this course, students will learn in detail how to design and create web pages and web sites. They will implement their designs with a web page editor such as Microsoft FrontPage or Netscape Composer. They will also learn how to fine tune their web pages by modifying the HTML code generated by the editor.

## Prerequisite: CIS 140 or CIS 142 or equivalent Internet experience with Department Chair approval.

Students will study advanced topics in the design and implementation of web pages and web sites and learn the HTML codes associated with them. They will implement their designs with a web page editor such as Microsoft FrontPage or Netscape Composer. Topics will include advanced studies in tables, forms and frames, manipulating graphic files for web page layout, designing and using cascading style sheets, working with linked and embedded sound and video files on web pages, and creating CGI scripts for enhancement and user interaction on web sites.
Corequisite: CIS 240.

## 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 Macromedia Flash to develop web content and web pages. Students will also expand their knowledge of Cascading Style Sheets (CSS) gained in CIS-146 and use a tool to make PDF documents for inclusion on a web page. Students will also learn to incorporate video and sound files in their web pages. Students will also use a product like Adobe Image Ready to dissect images and create web pages with the latest photographic effects. The student will then tie all these technologies together with use of a web page editor like Microsoft Front Page or Macromedia/ Adobe Dreamweaver.
Prerequisite: CIS 146
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 <br> 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. Formerly IST 219, students cannot get duplicate credit.
Prerequisite: CIS 152.
CIS 258-Advanced C++ Programming 3 Sem.-Hrs.
This course is a continuation of the Object-Oriented Programming with $\mathrm{C}++$. 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. Formerly IST 288, students cannot get duplicate credit.
Prerequisite: CIS 158.

CIS 260-Advanced Programming with Visual Basic
This course covers the creation of applications that utilize advanced features of Microsoft Windows. These topics include programming applications that use the clipboard, calling DLLs within a Visual Basic program, use of Windows API, ADO database programming, Multi-user Database Programming, and Multiple Document Interface.

## Prerequisite: CIS 160.

CIS 263-Internet Active Server Pages with Visual Basic
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 160.
CIS 266-Internet Programming 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 or CIS 263.
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 140.
Corequisites: CIS 240, CIS 242.

A team comprised of two or more students will integrate systems analysis, systems design, programming, and business and information systems concepts, principles and practices in the development of a computerbased information system/ web site. They will apply technical, managerial, communications and interpersonal skills to the development of this information system. Formerly IST 222, students cannot get duplicate credit.

## Prerequisites: (CIS 150 or CIS 152) or (CIS 148 and CIS 266 or CIS 263)

CIS 291/298-Upgrading Computer Software Skills
1-3 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. Formerly IST 294, students cannot get duplicate credit.

## Prerequisite: An advanced programming course in RPG, COBOL, C++, Visual Basic or JAVA (CIS 250, CIS 252, CIS 258, CIS 250 or CIS 266).

## 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 <br> 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 Skillbuilding

3 Sem.-Hrs.
This class is designed to assist students in fulfilling testing requirements from an Incomplete received in CRC 112, 113, 114, or 115. Students shall only be allowed to enroll in CRC-099 up to twice during their enrollment in the CRC program at the discretion of the instructor and with permission of the CRC program supervisor. 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.

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 II

6 Lect., 6 Sem.-Hrs.
Continued emphasis on building a realtime translation 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-andanswer testimony.
Prerequisites: CRC 110, ENG 101, OMT 147
Corequisite: CRC 130
CRC 112-Verbatim 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 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 com-puter-aided transcription system.
Prerequisites: CRC 112, CRC 120
Corequisite: CRC 230
CRC 114-Verbatim 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 com-puter-aided transcription system as learned in CRC 130 and CRC 230.
Prerequisites: CRC 113, CRC 230
Corequisites: CRC 211, CRC 212, CRC 220
CRC 115-Verbatim VI Format:
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 com-puter-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 , CRC 211, CRC 212, CRC 220
Corequisite: CRC 290

This course distinguishes between general grammatical rules and those unique to a verbatim transcript of proceedings from a courtroom, hearing, or realtime environment to allow the student to more clearly punctuate the spoken word. Proofreading and research skills will also be taught. Students will experience through class work and homework the volume of tasks other than steno-writing covered by a professional reporter.
Prerequisites: CRC 111 and ENG 101
Corequisite: CRC 112
CRC 130-Court Reporting Technology I 2 Lect., 2 Sem.-Hrs.
Introduction to computer-aided transcription (CAT). Development of writing and editing skills for realtime. Development of personal CAT dictionary.
Prerequisite: CRC 110
Corequisite: CRC 111
CRC 211-Medical Reporting
3 Sem.-Hrs.
This course provides the Court Reporting/Captioning student medical vocabulary and corresponding dictated material of a medical nature, i.e., areas involving the body systems and functions, psychological and physical diseases, and drugs, with a focus on root words, prefixes and suffixes. The student is also instructed on the methods of researching medical information such as names and descriptions of diseases and drugs.
Prerequisites: CRC 113, OMT 130, BIO
Corequisites: CRC 114, CRC 212, CRC 220
CRC 212-Multiple-Speaker
3 Sem.-Hrs.
Multiple-speaker dictation in simulated judicial and administrative hearing settings; with instruction in writing multiple speakers in the realtime environments of CART and Captioning. Emphasis is placed on proficiency in writing and distinguishing between more than one speaker while performing all duties and responsibilities of a judicial court reporter, CART provider, and Captioner. This course is designed to give the student a realistic, hands-on view of what can be expected in actual multiple-speaker reporting situations.
Prerequisites: CRC 113, CRC 230
Corequisites: CRC 114, CRC 211, 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, and the realtime venues of judicial reporting, captioning and communication access realtime translation (CART). Review of the National Court Reporters Association (NCRA) Code of Professional Ethics is presented. Students will incorporate current events into their study of the realtime professional.
Prerequisite: CRC 113
Corequisite: CRC 114
CRC 230-Court Reporting Technology II
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, CRC 130
Corequisite: CRC 113

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.

## CRC 299-Internship

3 Sem.-Hrs.
The internship program is intended to give the student practical work experience in the judicial and realtime reporting environments 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 <br> 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 <br> 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.

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 covered, emphasizing contemporary views in the biological, psychological, and socio-
logical 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.

## 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 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.
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.
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.

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.
DHY 201-Dental Hygiene Seminar III 2 Sem.-Hrs.
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, 122.
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.
Corequisites: PSY 103, DHY 201, 202, 203, 204.
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 2 Sem.-Hrs.
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.

## DHY 220-Dental Hygiene Practicum

2 Sem.-Hrs.
This course is designed for second year students who have demonstrated higher than average accomplishment in DHY 211 and have accumulated a substantial portion of the requirements for DHY 212.

This practicum can also be taken by graduate students who wish to further develop or refresh their clinical skills and experience.

This course provides further development of the practical application of dental hygiene practices which the dental hygientist may perform in Pennsylvania. These practices include patient assessment, dental radiography, debridement of teeth, polishing, fluoride application and patient/ office management procedures The student will complete approximately 120 hours of clinical experience at an off campus clinical or private dental office site under the direct supervision of a licensed dentist.
Prereguisites: PSY 103, DHY 201, 202, 203, 204, 205. Senior enrollment in dental hygiene or graduate status and department approval.
Corequisites: SPE 125 or 210, SOC 215, DHY 211, 212, 213.

## EARLY CHILDHOOD EDUCATION

CHD 100-Introduction to Early Childhood Education.*
3 Sem.-Hrs.
This course examines the history and rationale for early childhood programs. It provides an introduction to child development, the types and philosophies of children's programs, and the role of the early childhood professional. Practical experience in a children's program for a total of thirty hours is an integral part of the course.
Prerequisite for all other CHD classes.
Corequisite: CHD ECR
CHD 101-Infants \& Toddlers*
3 Sem.-Hrs.
This course studies children from birth to age three. It combines theories of infant and toddler development with activities and techniques to use in programs for young children. (Fall only - Main Campus)
Prerequisite: CHD ECR Corequisite: CHD 100.

## CHD ECR-Early Childhood Regulations*

0 Sem.-Hrs
This course ensures that students entering the Early Childhood Education Program meet the required regulations for employees in the field. Students who register for CHD 100 (Introduction to Early Childhood Education) will be required to register for CHD ECR. This is a Pass/Repeat course. Note: Current requirements are the Department of Public Welfare Child Abuse Clearance and the Pennsylvania State Police Criminal Clearance.
Corequisite: CHD 100.
CHD 201-Children's Music \& Movement** 3 Sem.-Hrs.
This course explores the importance of movement, music and rhythm activities for children. It includes methods and appropriate materials for developing the physical and musical capabilities of the young child. (Spring only - Main Campus) Prerequisite: CHD 100.

## CHD 202-Children's Art**

3 Sem.-Hrs.
This course surveys the creative development of young children. Children's Art explores a variety of art media and techniques with an emphasis on process and communicating with children about their art. (Fall only - Main Campus)
Prerequisite: CHD 100.

This course focuses on making literature come alive for young children. It emphasizes an exposure to, and evaluation of, quality children's literature in a variety of genres. The course enables students to transpose a theoretical knowledge of children's literature into lively, engaging activities. (Spring only - Main Campus) Prerequisite: CHD 100.

## CHD 204-Children's Science \& Math**

3 Sem.-Hrs.
This course investigates mathematical and scientific concepts and skills in relation to children's intellectual development. It involves materials and methods for incorporating these concepts into the early childhood curriculum.
Prerequisite: CHD 100.
CHD 205-Health, Safety \& Nutrition*
3 Sem.-Hrs.
This course emphasizes established health, safety and nutritional practices in children's programs. It stresses the responsibilities of early childhood professionals in preventing disease and accident and for promoting positive health and nutrition habits in children. (Fall only - Main Campus)
Prerequisite: CHD 100.
CHD 207-Young Children In Society*
3 Sem.-Hrs.
This course focuses on the diversity of influences of home and family, culture and society that shape the social and emotional development of children. It stresses an antibias approach. (Spring only - Main Campus)
Prerequisite: CHD 100.
CHD 208/PSY 204-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.
Prerequisites: PSY 103 and CHD 100.

## CHD 210-Children with Disabilities*

3 Sem.-Hrs.
This course defines and analyzes exceptional conditions in young children. It emphasizes 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 trends and issues in early childhood special education.
Prerequisite: CHD 100.
CHD 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.
Prerequisite: CHD 100, CHD ECR, and two other CHD courses. Students must maintain a " C " grade in all Child Development courses or obtain permission from the Early Childhood Program Coordinator in order to take a CHD 216.

## CHD 220-Field Work in Child Development*

3 Sem.-Hrs.
This course integrates practical experience and theoretical knowledge in a year long sequence. Students work directly with young children for 10 hours a week in child care and Head Start Programs, kindergartens, primary grades, nursery schools
and programs for children with disabilities. Seminars in which students have the opportunity to discuss successes, problems, strategies and curriculum components are an important component of the course. (Fall only)
Prerequisites: CHD 100, CHD ECR and four additional CHD courses are required. Students must maintain a " C " grade in all Early Childhood Education courses in order to take CHD 220.
CHD 221-Field Work in Child Development* 3 Sem.-Hrs.
This course builds on CHD 220 in its integration of practical experience and theoretical knowledge. Students continue their interaction and activities with young children for 10 hours a week in a variety of settings. Seminars focus on major aspects of child development, guidance, families and professionalism. (Spring only) Prerequisite: CHD 220. Students must maintain a "C" grade in all Early Childhood Education courses in order to take CHD 221.

* Required Early Childhood Education course
** Elective Early Childhood Education course - 9 credits required


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) <br> 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 professional 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 <br> 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 ex-
perience 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 $1 \quad 2$ 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 22 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 <br> 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 32 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 <br> 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 troubleshooting 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 <br> 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.

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 all the aspects and components of a typical Emergency Services (EMS) System. This class will include the legislative aspects, medical control and accountability, communications, technology, and an overall description of numerous functioning EMS Systems.

## EMS 205-Advanced Paramedic Practice <br> 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 <br> 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.) <br> 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.

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.

## 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 wordprocessing 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.

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 <br> 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 studentsponsored 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 <br> 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 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 <br> 3 Sem.-Hrs.

An introduction to Western music including the elements of music, various musical styles, medias and forms, stylistic periods, and significant composers.

## FIRE SCIENCE TECHNOLOGY

## FST 101-Introduction to Fire Protection and Prevention <br> 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 <br> 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 <br> 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 <br> 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 <br> 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.

## FOOD PRODUCTION MANAGEMENT

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)

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)

## FOREIGN LANGUAGES

## FRE 101-Elementary French I

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 <br> 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

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, 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 <br> 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 <br> 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 111-Bowling <br> 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.

Basic skills of mobility, offense and defense; judged bouting and match play. Necessary equipment will be provided.

## HPE 121-Aerobic Step Training <br> 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 <br> 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.

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 <br> 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 2 Lect., 2 Lab., 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 prob-
lems of drugs, alcohol and tobacco, communicable and non-communicable diseases; sexual maturity, and marriage reproduction. (On-campus Fall semester only or Telecourse each semester.)

## HPE 160-Introduction To Nutrition

3 Sem.-Hrs.
This course is designed to introduce the student to basic, introductory, collegelevel principles of nutrition. The course will not only allow for the development of a factual foundation of the science of nutrition but will also encourage the student to evaluate his/her eating habits and diet.

## 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.)

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

2 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.
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.

This course will examine the history, leadership, trials and triumphs of AfricanAmericans. It begins with the earliest Africans brought to America as slaves, and studies the main themes affecting the lives of African-Americans, emphasizing economic and social trends as well as the various class structures and gender differences. Special consideration will be given to the rise and growth of slavery and segregation, the Civil Rights Movement and on some of the primary 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 <br> 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 <br> 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 <br> 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

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. Corequisite: CHE 111.
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 105-Woody Plants I
2 Lect., 2 Lab., 3 Sem.-Hrs.
An introduction to the study of trees, shrubs, and vines grown in nurseries for landscape purposes. Major deciduous tree families are emphasized. This course stresses identification and uses of woody plants in a lecture and laboratory setting. Corequisite: HRT 101.

## HRT 106-Woody Plants II

2 Lect., 2 Lab., 3 Sem.-Hrs.
Continuation of HRT 105. Additional study of trees, shrubs, vines, ground covers and their varieties and cultivars with emphasis on conifers, broad leave evergreens and minor deciduous tree families in a lecture and laboratory setting. Prerequisite: HRT 105.

## HRT 107-Greenhouse Production I

2 Lect., 2 Lab, 3 Sem.-Hrs.
An introduction to the management of the greenhouse environment and the effects of temperature, light, water, soil and nutrition on plant growth. Includes plant culture and demonstration of techniques. Students will propagate seeds and cuttings of flowers and vegetables in a operational greenhouse.
Prerequisite: HRT 101. Corequisite: HRT 113.

## HRT 109-Floral Design I <br> 2 Lect., 2 Lab., 3 Sem.-Hrs.

This introductory course provides instruction in the principles of the design of fresh flowers and includes form, style and composition. The hands-on 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. (Spring, even years only)

## HRT 111-Floral Design II

2 Lect., 2 Lab., 3 Sem.-Hrs.
This course expands upon the basic concepts learned in HRT 109 as they apply to designing dried and silk arrangements as it prepares students for entry level positions in the floral industry. It covers procedures for preserving, coloring and storing flowers to be used in permanent designs. In addition, it offers a brief introduction of shop layout and design as well as product presentation and pricing. (Fall, even years only)

## Prerequisite: HRT 109.

## HRT 113-Plant Propagation

2 Lect., 2 Lab., 3 Sem.-Hrs.
Theory and practice of plant propagation by sexual and asexual means, including micropropagation, with application in floriculture production and nursery production.
Prerequisites: HRT 101 or BIO 121.
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 105.
HRT 201-Greenhouse Production II
2 Lect., 2 Lab., 3 Sem.-Hrs.
Production of cut flowers and potted plants with emphasis on techniques used for important commercial crops. A crop will be grown by students as part of the laboratory experience. Identification and use of greenhouse grown plant material is essential.
Prerequisite: HRT 107.
HRT 205-Interior Plantscaping
2 Lect., 2 Lab., 3 Sem.-Hrs.
Identification, culture, propagation and use of house and conservatory foliage plants. Course includes the study of artificial lighting, indoor landscaping for the home, malls and business, soils and fertilizers for commercial growing, insects, diseases, and cultural problems associated with foliage plants.
Prerequisite: HRT 101.

Nursery and Garden Center Management deals specifically with the general operations of both the retail garden center and the wholesale/retail nursery. The student will be introduced to the requirements for site selection of a nursery and the necessary requirements for site selection of a garden center. These requirements would include ecological factors, economic factors, sociological factors and biological factors. The student will select a site based on the aforementioned requirements and develop a plan for opening both the retail garden center and a wholesale/retail nursery.
Prerequisites: HRT 101, HRT 105, HRT 104.
HRT 216-Arboriculture, Introduction to Principles and Practices 3 Sem.-Hrs.
Arboriculture is a science specifically dealing with the care and maintenance of shade and ornamental trees. The student will be introduced to the principals and practices presently being used in this every-evolving science. The appreciation of shade and ornamental trees, their function, their aesthetical and monetary value and their contribution to society will be explored. The business of shade and ornamental tree care will be examined and the requirements for licensing and ethical business practices investigated.

## Prerequisites: HRT 106, HRT 115.

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 222-Landscape Architectural Design
2 Lect., 2 Lab., 3 Sem.-Hrs.
The student will be introduced to a higher level of principles and practices in the landscape Architecture profession. The course will include the basic principles of design methodology and further explore the environmental issues of large landscape projects. Professional practice, licensing, project coordination with architects and engineers, and construction logistics will be examined. Continued techniques in graphic presentations.
Prerequisites: HRT 220, 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 105.

## HOTEL AND RESTAURANT MANAGEMENT/ PASTRY ARTS 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)

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 <br> 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 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 <br> 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

The fundamental principles of hospitality law with emphasis on the laws of society, contracts, sales, franchise and lease contracts. Emphasis is focused on pre-
venting 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 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 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.

## 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 \& 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 \& 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 \& 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)

## 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 and Family Dynamics
3 Sem.-Hrs.
This course explores the areas of group work and family therapy. The course emphasizes both theoretical and practical approaches to counseling with groups and family systems.

## 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 <br> 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 all Human Services courses in order to take HMS 220.)
Prerequisites: HMS 101, 102 and 201.
*HMS 221-Field Work in Human Services II 3 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 all 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.
*Required Human Services Courses.

## INTEGRATED ENTERTAINMENT TECHNOLOGY

## IET 103-Construction and Fabrication Practices 2 Lect., 2 Lab., 3 Sem.-Hrs.

This course will introduce students to the tools and equipment used to construct and fit cabinetry, as well perform simple wall construction used in the integration of audio systems and theaters. Students will develop an understanding of standard construction techniques used to facilitate the installation of audio, video, security and automation equipment. The Uniform Construction Code will be introduced as it applies to existing structure.
IET 210- Distributed Audio Entertainment Integration 2 Lect., 2 Lab., 3 Sem.-Hrs.
This course is designed to develop the skills necessary to plan and integrate Distributed Audio Entertainment systems into today's work and play environments. Students will be introduced to the tools, equipment and techniques to install and integrate audio entertainment such as: theater surround sound systems, multi-room multi-control audio systems with single point amplification, as well as IP based distributed audio systems. Students will work with room mode modeling software to locate loudspeakers in a listening environment to achieve a sound stage and fulfill the rules of physioacoustics

## Prerequisite: EET 125.

## IET 215-Electronics Entertainment Integration 2 Lect., 2 Lab., 3 Sem.-Hrs.

This course will cover amplifier configuration, amplifier biasing, amplifier coupling, direct coupled and audio frequency amplifiers as well as digital electronics. Prerequisite: EET 125.

## IET 220-Security Systems <br> 2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed to develop the necessary skills to design and install security systems in today's homes and businesses. Students will be introduced to security and detection systems. Students will design, plan, program, and install intrusion detection and security systems with door contacts, field disturbance motion sensors, and glass breakage detection. This course will also cover smoke detection, central station monitoring, and the use of cameras and the Internet for security system applications.

## Prerequisite: EET 125.

## IET 225-Distribute Video Entertainment 2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed to develop skills necessary to plan and integrate Distributed Video Entertainment systems into today's work and play environment. Students will design video distribution used for close circuit video monitoring systems and theater systems. Students will work with CRT, plasma, and LCD displays, video projectors, HDTV, digital cable, video, amplifiers, modulators and demodulators, and video cameras.

## Prerequisite: EET 125.

## IET 230-Automation \& Enviromental Control 2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed for students wishing to develop the skills necessary to plan and integrate automation and environmental control systems into today's homes and light commercial applications. Through demonstration and laboratory experiences, students will be introduced to the tools, equipment, and techniques to integrate automation equipment, such as multi-room lighting control systems, appliance controllers, window covering controls, water management sprinkler controls, heating, ventilation and air conditioning controls, humidity controls, gate access controls, pool and spa controls, and security systems interfaces so they can work together to improve safety, comfort and convenience.
Prerequisite: EET 125.

## 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, de-
sign 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 practiceof 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.

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 prob-lem-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.

## KITCHEN \& BATH DESIGN

KBD 120-Kitchen \& Bath Equipment and Materials 2 Lect., 2 Lab., 3 Sem.-Hrs.
Kitchen and Bath Equipment and Materials will involve the exploration of cabinetry, equipment, and finishes specific to kitchen and bath design projects. Students will become familiar with the nomenclature, construction, and evaluation of different categories of materials and equipment as well as specifying their application. Engineering details of fixtures and fittings will be studied in order to develop an understanding of durability, ecological efficiency, and appropriate application in residential construction and renovation. Course format will include readings and lectures from the NKBA technical manuals as well as other supplemental and experiential learning assignments.

Kitchen and Bath Design Drafting and Presentation provides training in the graphic representation of design proposals to both trades people and clients. Preliminary and developed design proposals for clients are further transformed into technical, construction drawings. In addition to drawings completed from direct measurements of existing kitchen and bath spaces, design proposals including technical plans will be completed following the NKBA Graphic and Presentation Standards. Course format will include readings and lectures from the NKBA technical manuals as well as other supplemental and experiential learning assignments. Students are expected to have fundamental drafting skills prior to enrolling in the course.

KBD 225-Kitchen \& Bath Design Studio I
1 Lect., 4 Lab., 3 Sem.-Hrs. Kitchen and Bath Design Studio I allows students to further develop an understanding of the philosophy of design including color theory, architectural styles and application of the principles and elements of design as applied to kitchen and bath projects. In-depth exploration into the purpose and function of kitchens and baths will follow the format of the National Kitchen and Bath Association (NKBA) Planning Guidelines. Students will acquire basic skill in applying all aspects of kitchen and bath design 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 the NKBA Graphic and Presentation Standards. Course format will include readings and lectures from the NXBA technical manuals as well as other supplemental and experiential learning assignments. Students are expected to have fundamental drafting skills prior to enrolling in the course.

## KBD 230-Kitchen \& Bath Design Studio II

1 Lect., 4 Lab., 3 Sem.-Hrs.
Kitchen and Bath Design Studio II continues the competencies developed in KBD 225 with special emphasis on universal design, safety, and the integration of mechanical equipment. This course includes a special focus on a Capstone project which applies program wide competencies to a comprehensive design proposal for an actual client. A special section on CAD standards specific to kitchen and bath design software packages will allow students to complete projects using typical industry programs. 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 kitchen and bath projects will be explored at a more sophisticated level. In-depth exploration into the purpose and function of kitchens and baths will follow the format of the National Kitchen and Bath Association (NKBA) Planning Guidelines. Students will document and convey all aspects of kitchen and bath design 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 the NKBA Graphic and Presentation Standards. Course format will include readings and lectures from the NKBA technical manuals as well as other supplemental and experiential learning assignments.

## 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 <br> 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 <br> 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 <br> 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 <br> 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.

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 <br> 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 business department. This internship is intended to give the student practical work experience in the private and public law sectors in doing the work required of a paralegal. The student will be supervised by the coordinator of the internship.
Prerequisite: 18 credits of LAP.

## MATHEMATICS

COS 230-Elementary Data Structures
3 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).

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 <br> 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 in-dustrial-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 105-Intermediate Algebra <br> 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.

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 \& 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 \& 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 \& 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 \& 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.

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 studied include: linear systems and transformations, matrix theory and determinants, vector spaces, eigenvectors, eigenvalues, inner products, and their applications. A graphing calculator is required.
Prerequisite: MAT 251.
MAT 279-Differential Equations
3 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.

## MOBILE ELECTRONICS INSTALLATION

## MEI 121-Mobile Electronics I

2 Lect., 2 Lab., 3 Sem.-Hrs.
This introductory course will cover the basic principles of mobile electronics and automotive electronic systems. It will provide the student with theoretical and practical experiences necessary to fully understand the tools, equipment and measurements necessary for the future study of the installation of mobile electronic equipment.
MEI 122-Mobile Electronics II
2 Lect., 2 Lab., 3 Sem.-Hrs.
This is a continuation of Mobile Electronics I. This course will cover digital electronics with emphasis on the 7400 Series TTL and CMOS technology. Other topics will include: amplifier configuration, amplifier biasing, amplifier coupling, direct current and audio frequency amplifiers.

## Prerequisite: MEI 121.

## MEI 124-Automotive Security Systems

2 Lect., 2 Lab., 3 Sem.-Hrs.
This course will cover the principles and the operations of security systems and convenience features in the automotive environment. This hands-on course will include the installation and integration of automotive security systems. Types of systems to be covered include: passive security systems; the various types of switches and sensors, including pin switches, magnetic reed sensors, glass breakage detectors, microwave and radar sensors; output devices, sirens and horns; light flashers; paging systems, cellular phone autodialer, remote starts, automatic window rollup modules, trunk release, keyless entry and mapping systems.
Prerequisite: MEI 121.
MEI 128-Automotive Stereo Systems
2 Lect., 2 Lab., 3 Sem.-Hrs.
This course will cover AM \& FM radio principles and the installation of basic stereo head units. Students will learn to make modifications and add features to this basic system which will include: medium power add-on amplifiers, high power add-on amplifiers, parametric and graphic equalizers. This course will also include speaker specifications and enclosure design using computer aided design software and real time analyzer.
Prerequisites: MEI 121, MEI 132, CIS 208.
MEI 130-Customer Relations
3 Sem.-Hrs.
This course, dealing with customer service skills, will cover techniques for building repeat and referral business through improved customer service. Topics will
include: customer service management, the nature of customer relations, developing policies, hiring, training for superior service, analyzing and resolving complaints, telephone techniques, how to create excellence by exceeding customer expectations, in-person customer relations, understanding your customers, cross-selling and addon sales, and the legal side of customer service.

## Prerequisite: BUS 248.

## 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 <br> 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/ <br> 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 <br> 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 En-
glish 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-ofhouse 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 oppor-
tunity 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 chemi-
cal 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 $\mathrm{C}-\mathrm{V}$ and $\mathrm{I}-\mathrm{V}$ 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.

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.

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.

NET 205-Fundamentals of Health Physics
3 Lect., 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.

## 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.

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.

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 childbearing 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 <br> 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.

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 en-

 roll in 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 125-BeginningTypewriting
3 Sem.-Hrs.
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 key, as well as instruction in features of the latest version of Microsoft Word including creating, printing letters, memos and manuscripts. Students will have a goal of keying 40 words per minute with 3 errors on a three-minute timing.

OMT 126-Intermediate Typewriting
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 increase keying speed toward a goal of 55 words per minute. Common business documents such as letters, memos, reports, tables with formulas, itineraries, agendas, minutes, and labels will be created. Advanced formatting includes mail merge,forms, styles and desktop publishing.

## Prerequisite: OMT 125.

OMT 130-Medical Terminology I
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, vocabulary-building, and preparation for medical transcription in subsequent semesters.

## OMT 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, and to process insurance claims electronically. Students work extensively with the software; the course is supplemented with class discussion and additional activities.

## Prerequisite: Keyboarding Skill.

OMT 135-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 insurance carries such as: government plans, commercial carries, managed care systems, workers' compensation, etc. Students learn billing for both physician and hospital claims. Students will be introduced to basic coding techniques.

Ten legal cases will be transcribed during this course. Students will work each case from its onset through its conclusion, formatting a variety of documents and correspondence. Each case includes background information about the legal action and terminology particular to that action.

## OMT 154-Office Procedures I <br> 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.

## Prerequisite: OMT 125 and Corequisite: CIS 110.

OMT 230-Medical Terminology II
3 Sem.-Hrs.
A continuation of Medical Terminology I. The course stresses medical abbreviations, stem words and their combinations, technical terms and their proper usage. The following of directions given in medical phraseologies; medical histories, surgical terminology, X-ray terminology, pathology, autopsy, medical syndromes, American drug index, basic terms of the medical specialties, and diseases of the human system. Vocabulary is increased by using medical reports, outlines, histories, and other medical forms.
Prerequisite: OMT 130.
OMT 233-Medical Office Procedures II
3 Sem.-Hrs.
Continuation of BUS 233. This computerized simulation using medical software emphasizes patient billing. It introduces and simulates situations using a 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: OMT 133.

OMT 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: OMT 130.

OMT 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. (Spring only)
Prerequisite: OMT 234.

## OMT 238-CPT-4 Coding Insurance Billing

To introduce the student to the support function of accounting and patient billing aspects of a medical practice. Students will gain practical experience using patient billing software with a thorough knowledge of CPT-4 (Physicians' Current Procedural Terminology).
Prerequisite: OMT 130.
OMT 239-ICD-9CM Coding
3 Sem.-Hrs.
To introduce the student to the International Classification of Diseases - 9th Edition widely used in the classifying of diseases and operations for statistical and insurance purposes.
Prerequisite: OMT 130.

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: OMT 154.
OMT 299-Office Application Specialist Internship 1 Lect., 4 Lab., 3 Sem.-Hrs.
A student who has the recommendation of the office management faculty is given guidance in finding an office position in the secretarial or medical office area. This internship is intended to give the student practical work experience in the office or medical community. The instructor will meet periodically with students and immediate supervisors to discuss progress during the 80-hour employment.

## PHILOSOPHY <br> PHI 150-Introduction to Philosophy <br> 3 Sem.-Hrs. <br> 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 <br> 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 110-Introduction to Physical Geology

3 Sem.-Hrs.
This course provides a comprehensive study of the Earth's physical processes and properties, with emphasis on understanding the scientific theories behind the geological principles.

## 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 <br> 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. <br> 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 <br> 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.
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.
Concurrent with MAT 103 (Trade) 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. Wiring from the main panel box to and including the boiler control wiring, and the electro/mechanical theory of the control circuit. Individual controls will be demonstrated showing their physical/mechanical and electric/electronic properties and capabilities. Theory concerning the safety and comfort design of the con-
trol system, and applications to various fuel use. Practical demonstrations on controlling steam and hot water heating systems, and designing of systems to achieve specific results for heating.

## 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.

## Concurrent with 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.
Prerequisite: 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 <br> 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 Lect., 3 Sem.-Hrs.
A study of the BOCA National Mechanical Code as it applies to residential and light commercial buildings.
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.
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 <br> 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 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.

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.

## PUBLIC SAFETY COMMUNICATIONS

## PSC 101-Basic Telecommunicator (Part A)

4 Sem.-Hrs.
This class will be the first part of a two (2) part class that takes the non-experienced student and teaches them basic telecommunicator skills to achieve both the Pennsylvania State Certification and the Basic Association of Public/Safety Communication Officials (APCO) certification standards for the 911 center call taker and dispatcher. This class will cover certain aspects of the ACT 120c Pennsylvania requirements mandated for all certified telecommunications and certain aspects of the Basic APCO curriculum required for national certification.

## PSC 102-Basic Telecommunicator (Part B) <br> 4 Sem.-Hrs.

This class will be the second part of a two (2) part class that takes the non-experienced student and teaches them the basic telecommunicator skills to achieve both the Pennsylvania State Certification and the Basic APCO certification standards for the 911 center call taker and dispatcher. This class will cover certain aspects of the ACT 120c Pennsylvania requirements mandated for all certified telecommunications and certain aspects of the Basic APCO curriculum required for national certification that was not covered in the first class.

PSC 103-Specific Dispatching
6 Sem.-Hrs.
This course is structured to take the Basic Telecommunicator and advance them to the Pennsylvania ACT 120c. 106 Emergency Dispatcher Certification level. This class will include specific issues that are pertinent in the area of fire dispatching, police dispatching, EMS dispatching, and EMA dispatching. At the conclusion of the class, each student will be eligible for certification after successful completion of both the practical and written examination.

PSC 104-Emergency Medical Dispatch (EMD) 6 Sem.-Hrs.
The EMD program helps dispatchers provide instructions for treatment of certain life threatening and serious medical conditions. The EMD program helps dispatchers identify life threatening conditions. Medical control determines which medical conditions constitute high levels of medical urgency depending on the types of resources available and the development of response configurations for various levels of emergency situations. EMD programs recognize the EMS as the "First of the First Responders." With the advent and advancement of EMD principles and practices, it is now an accepted fact that patient treatment can begin the moment the dispatcher answers the request for EMS. This makes the EMD a true "first responder" by providing early treatment instructions prior to the arrival of dispatched medical resources.

## PSC 105-National Crime Information Center/Commonwealth <br> Law Enforcement Assistance Network (NCIC/CLEAN) 3 Sem.-Hrs.

This class is designed to teach a public safety communications officer in the use of the NCIC and CLEAN systems utilized as part of their job. It will also discuss the AMBER alert system, NOAA national alert system and other affiliated federal and state associated informational warning systems.

This class is designed to provide actual real life experience in the areas of basic call taking, fire, EMS, police and EMA dispatching. The student will be placed in an actual 911 center and through the process of direct monitoring and systematic evaluation, each student will gain experience through the usage of preceptors and an apprenticeship program.

## 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 DSP020, 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 101-Real Estate Fundamentals

3 Sem.-Hrs.
To provide the student with a basic foundation for additional study, and to suggest the practice of Real Estate in Pennsylvania. The course is designed to acquaint the student with the language, principles and laws that govern the business of Real Estate. Emphasis is on the underlying concepts of land, property, rights in realty and the means, methods and laws that govern the conveyance of these rights. (Fall only)

## RET 102-Real Estate Practice <br> 3 Sem.-Hrs.

To provide the student with an introduction to all facets of the Real Estate business including a survey of fields of specialization. Emphasis is on the role of a Real Estate agent in the field of Residential Broke rage. This course is designed to acquaint the student with the basic techniques, procedures, regulations and ethics involved in a Real Estate transaction along with a working knowledge of the forms and documents used including the related mathematics. (Spring only)

## 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) Prerequisite: RET 101.

## 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 II3 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. <br> 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 <br> 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.

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 <br> 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.

## 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 <br> 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 apprehen-
sion, 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 <br> 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.

## 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

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

This course is a continuation of Acting I. This course refines student skills they developed in Acting and continue to explore the acting process through readings, theatre attendance, and performance work. Emphasis is placed on character analysis through lecture, demonstration, improvisation, script analysis, movement, and scene projects. Students will also examine the role of imagination, perception, and creativity in performance.
Prerequisite: THR 101.

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## CALENDAR 2007-2008

NOTE: EMERGENCY CLOSINGS MAY ALTER THIS ACADEMIC CALENDAR.
OFF-CAMPUS CLOSINGS MAY DIFFER FROM THOSE LISTED FOR ON-CAM-
PUS. PLEASE CHECK THE SCHEDULE BOOK FOR OFF-CAMPUS INFORMA-
TION.

## FALL SEMESTER — 2007

Registration — High School Sites ........................ M-T-W-TH, August 6,7, 8, 92007
Registration - (Begins April 2007) .............................................................. Ongoing
Late Registration
August 27-31
(Department Chairpersons will be available August 21, 22, and 24)
College Inservice Thursday, August 23
Adjunct Inservice ........................................................................Thursday, August 23
Classes Begin ................................................................................. Monday, August 27
(All Locations except Corporate Learning Center)
Labor Day (College Closed) ........................................................ Monday, September 3
Last Day for Withdrawal with Partial Tuition Refund ....... Monday, September 17
Classes Begin — Corporate Learning Center ....................... Monday September 17
Professional Development Day (No Classes) ....................... Wednesday, October 17
College Night ........................................................................... Thursday, October 18
Spring 2008 Registration Begins ................................................................. October, 2007
Last Day to Drop Classes or
Withdraw Officially from School ................................ Wednesday, November 7
Thanksgiving Recess Begins (College Closed) ......... November 22 to November 26 (Thursday to Monday)
Classes Resume ...................................................................... Tuesday, November 27
Last Day of Classes - Corporate Learning Center .......... Thursday, November 29
Final Examinations - Corporate Learning Center ..... Mon.-Thur., December 3-6
Last Day of Classes .................................................................... Sunday, December 9
(All Locations except Corporate Learning Center)
Final Examinations .......................................................... Mon.-Sun., December 10-16
(All Locations except Corporate Learning Center)
Final Grade Reports Due $\qquad$ Monday, December 17
$\mathrm{M}-\mathrm{W}-\mathrm{F}$ days $=41$ days $\times 55$ mins. $=2,255$
$\mathrm{T}-\mathrm{TH}$ days $=29$ days $\times 80$ mins. $=2,320$

## SPRING SEMESTER — 2008

Registration - High School Sites W,TH, M, January 2, 3,\& 7, 2008
Registration - (Begins October 2007) Ongoing
Late Registration January 14-18(Department Chairpersons will be available January 7, 8 and 9)
College Inservice Thursday, January 10
Adjunct Inservice Thursday, January 10
Classes Begin Monday, January 14(All Locations execpt Corporate Learning Center)
Martin Luther King, Jr. Day (College Closed) Monday, January 21
Last Day for Withdrawal with Partial Tuition Refund Monday, February 4
Classes Begin - Corporate Learning Center Monday, February 4
Professional Development Day (No Classes) Wednesday, February 20
Deadline for Submitting Application for Graduation Friday, February 22
Summer \& Fall 2008 Registration Begins ..... March, 2008
Winter Break (Snow Make-Up Days) ..... Mon. , March 3-Sun., March 9
Classes Resume Monday, March 10
Snow Make Up Day (No Classes unless needed) Thursday, March 20
Holiday Recess (College Closed) Friday, March 21-Monday, March 24
Classes Resume Tuesday, March 25
Last Day to Drop Classes or
Withdraw Officially from School Tuesday, March 25
Last Day of Classes - Corporate Learning Center Thursday, April 24
Final Examinations -
Corporate Learning Center Mon.-Thur., April 28-May 1
Last Day of Classes Friday, May 2(All Locations execpt Corporate Learning Center)
Final Exams ..... May 3-9(All Locations execpt Corporate Learning Center)
Final Grade Reports Due Wednesday, May 12
Graduation Day ..... Thursday, May 22
Day after Graduation (College Closed) Friday, May 23
$\mathrm{M}-\mathrm{W}-\mathrm{F}$ days $=41$ days $\times 55$ mins. $=2,255$$\mathrm{T}-\mathrm{TH}$ days $=29$ days $\times 80$ mins. $=2,320$NOTE: EMERGENCY CLOSINGS MAY ALTER THIS ACADEMIC CALENDAR.OFF-CAMPUS CLOSINGS MAY DIFFER FROM THOSE LISTED FOR ON-CAM-PUS. PLEASE CHECK THE SCHEDULE BOOK FOR OFF-CAMPUS INFORMA-TION.
FULL SUMMER SEMESTER and DISTANCE LEARNING — 2008On and Off Campus
Registration Begins January, 2008
Registration - High School Sites ..... M-T-W, May 5, 6, 7
Registration - On-Campus Extended Hours ..... Monday, May 19
Registration - On-Campus Regular Hours Tues.-Thurs., May 20-22 andand Fri., May 23-Mon., June 2 *
Holiday Recess (Memorial Day - College Closed) ..... Monday, May 26
Classes Begin ..... Tuesday, May 27
Last Day for Withdrawal with Partial Tuition Refund Monday, June 9
Holiday Recess (Independence Day - College Closed) Friday, July 4
Last Day to Drop Classes or Withdraw Officially from School Tuesday, July 8
Classes End Thursday, July 31
Final Exams M-T-W-TH, August 4-7
Final Grade Reports Due Friday, August 8
SUMMER SESSION I — 2008
Registration Begins ..... January, 2008
Registration - On-Campus Extended Hours ..... Thursday, May 29
Registration - On-Campus Regular Hours ..... Mon.-Tues., June 2-3*
Classes Begin Monday, June 2
Last Day for Withdrawal with Partial Tuition Refund ..... Thursday, June 5
Last Day to Drop Classes or Withdraw Officially from School Monday, June 23
Classes End Tuesday, July 1
Final Exams Wednesday, July 2
Final Grade Reports Due Thursday, July 3
18 days $\times 125$ mins. $=2,250$
*Late Registration Fee Applies.

## INTERMEDIATE SUMMER SESSION - 2008

Registration Begins ..... January, 2008
Registration On-Campus Regular Hours Tues.-Wed., June 10-11Thursday-Tuesday, June 12-17*
Classes BeginMonday, June 16
Last Day for Withdrawal with Partial Tuition Refund Thursday, June 19
Holiday Recess (Independence Day - College Closed) Friday, July 4
Last Day to Drop Classes or Withdraw Officially from School ..... Monday, July 7
Classes End ..... Tuesday, August 5
Final Exams ..... Wednesday, August 6
Final Grade Reports Due Thursday, August 7 30 days $\times 75$ mins. $=2,250$
SUMMER SESSION II — 2008
Registration Begins January, 2008
Registration - On-Campus Extended Hours Thursday, July 3
Registration - On-Campus Regular Hours ..... Mon.-Tues., July 7-8*
Classes Begin ..... Monday, July 7
Last Day for Withdrawal with Partial Tuition Refund Thursday, July 10
Deadline for Submitting Graduation Applications Friday, July 18
Last Day to Drop Classes or
Withdraw Officially from School Monday, July 28
Classes End ..... Tuesday, August 5
Final Exams Wednesday, August 6
Final Grade Reports Due ..... Thursday, August 7
Diplomas Issued ..... Thursday, August 21
18 days x 125 mins. $=2,250$
*Late Registration Fee Applies.

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Administrative Affairs ..... (800) 377-5222 x 379
Admissions ..... (800) 377-5222 x 337
Advanced Technology Center ..... (800) 377-5222 x 425
Alumni Relations ..... (800) 377-5222 x 734
Athletics ..... (800) 377-5222 x 428
Bookstore ..... (800) 377-5222 x 434
Business Office ..... (800) 377-5222 x 364
Campus Security/Emergency ..... (800) 377-5222 x 304
Career Development/Job Placement ..... (800) 377-5222 x 458
College Relations ..... (800) 377-5222 x 732
Conference Center ..... (800) 377-5222 x 476
Continuing Education ..... (800) 377-5222 x 495
Counseling ..... (800) 377-5222 x 452
Dental Health Clinic ..... (800) 377-5222 x 446
Distance Learning ..... (800) 377-5222 x 352
Employment ..... (800) 377-5222 x 392
Financial Aid ..... (800) 377-5222 x 389
Foundation ..... (800) 377-5222 x 731
Library ..... (800) 377-5222 x 415
Marketing (800) 377-5222 x 736
Media Services Department (for emergencies) ..... 830-7862
Off-Campus Programs (800) 377-5222 x 479
Physical Plant Services ..... (800) 377-5222 x 301
Planning/Research/Institutional Development. ..... (800) 377-5222 x 730
President ..... (800) 377-5222 x 384
Purchasing/Accounts Payable ..... (800) 377-5222 x 371
Registrar ..... (800) 377-5222 x 339
Student Activities (800) 377-5222 x 428
Student Development ..... (800) 377-5222 x 381
Workforce Development ..... (800) 377-5222 x 480

| Campus tours are conducted by the Admissions Office. <br> To arrange your tour, call 800-377-LCCC, extension 337. |
| :--- |
| Visit LCCC on the Internet: http://www.luzerne.edu |


[^0]:    † English Composition I - "Microcomp".

[^1]:    * First-time students only.

[^2]:    * First-time students only.

[^3]:    * First-time students only.

[^4]:    * First-time students only

[^5]:    * First-time students only

[^6]:    * First-time students only

[^7]:    * First-time students only.
    ** In Elective area, three semester hours must be taken from either the Social Science/History, Science, Mathematics, or Computer Information Systems areas. This elective is also a Required General Education Course.
    *** Excludes Developmental MAT and MAT 103.

[^8]:    * First-time students only.

[^9]:    * First-time students only.

[^10]:    * First-time students only.
    ** Elective must be taken from either the Social Science/History, Mathematics, or Computer Information Systems areas.

[^11]:    * First-time students only.

[^12]:    * First-time students only.

[^13]:    * First-time students only.
    ** Elective must be taken from either the Social Science/History, Mathematics, or Computer Information Systems areas.
    *** See courses listed below.
    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

[^14]:    * First-time students only.

[^15]:    * First-time students only.
    ** 120 - hours Practicum may commence after second semester of the first year of study, but must be completed prior to graduation.

[^16]:    * First-time students only.

[^17]:    * First-time students only.

[^18]:    * First-time students only.
    ** Federal Aviation Regulations, PART 141, Flight School
    *** These courses are only needed to secure a commercial license. See your advisor for course recommendations if the intent is to obtain a Private Pilot's license.

[^19]:    * First-time students only.

[^20]:    * First-time students only.

[^21]:    * First-time students only.

[^22]:    * First-time students only.

[^23]:    * First-time students only.

[^24]:    * First-time students only.

[^25]:    * First-time students only.

[^26]:    * First-time students only.
    ** Students may take PHY 131 and 132 or PHY 151 and 152 ( 8 credits) during the Summer Semester. Please contact your advisor.

[^27]:    * TACKLE Program available - Contact Program Director
    ** First-time students only.

[^28]:    * First-time students only.

[^29]:    * First-time students only.

[^30]:    * First-time students only.

[^31]:    * First-time students only.

[^32]:    * First-time students only.

[^33]:    * First-time students only.

[^34]:    * First-time students only.
    ** 120 hour Practicum may commence after second semester of the first year of study, but must be completed prior to graduation.

[^35]:    * First-time students only.

[^36]:    ** 160 - hour Practicum may commence after the second semenster of the study, but must be completed prior to graduation.

[^37]:    * First-time students only.

    Note: Luzerne County Community College is a Nationally Certified Proctor Site for the National Center for Competency Testing. Graduates of the Medical Office Assistant/Insurance Specialist Degree will have the option to take an exam and become a Certified Insurance and Coding Specialist.

[^38]:    * First-time students only.

    Note: Luzerne County Community College is a Nationally Certified Proctor Site for the National Center for Competency Testing. Graduates of the Medical Office Assistant/Transcriptionist Degree will have the option to take an exam and become a Certified Medical Office Assistant.

[^39]:    * First-time students only.
    **Department Chair approval if prerequisites are not met.

[^40]:    * First-time students only.

[^41]:    * First-time students only.
    ** Must be taken concurrently.

[^42]:    * First-time students only.

[^43]:    First Semester
    ENG 101 - English Composition
    MAT 111 - Technical Mathematics I
    GET 113 - Technical Drafting I
    GET 121 - Manufacturing Processes I
    GET 123 - Technical Mechanics

[^44]:    (+) Department Chair approval is needed if prerequisites are not met.

    * May test out as a result of Placement Testing.

