# Cleveland Community college



#### NOTE

Cleveland Community College issues this catalog for the purpose of termining prospective students and other interested persons with information about the College and its programs. Announcements contained herein are suggested without notice and may not be regarded in the nature of binding college to a flacCollege or the State of North Carolina. Efforts will be made to keep changes to a minimum, but changes in policy by the State Board of Community Colleges, in Department of Community Colleges, or by local conditions may make some alterations in curriculum, fees, etc., necessary.

#### **VISITORS**

Visitors, and in particular prospective students are always we come at Elevalario Community College. The Students Services office will provide guide sarvices for groups or individuals between 8:30 a.m. and 3:30 p.m. Monday through Friday. The College is open until 10:00 p.m. Monday through Thursday and unit 1:00 p.m. on Friday and individuals may visit at their convenience. Questions acress the school and its programs will be answered by someone from the Student 2:00 p.m. office.

#### APPROVED BY

North Carolina State Board of Nursing
North Carolina Department of Veterans Education
Joint Review Committee on Education For Radiologic Technology

#### MEMBER INSTITUTION OF

American Association of Community and Junior Colleges
North Carolina Association of Colleges and Universities
North Carolina Department of Community Colleges
Southern Association of Colleges and Schools
Southern Association of Community and Junior Colleges

#### ACCREDITED BY

Cleveland Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees.

# GENERAL INFORMATION

## CLEVELAND COMMUNITY COLLEGE "An Equal Opportunity Educational Institution"

#### DIRECTORY OF CORRESPONDENCE Telephone (704)484-4000

Inquiries will receive prompt attention if addressed to the Administrative Offices below at Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28150

| Academic Affairs                    | Vice President of Academic Affairs |
|-------------------------------------|------------------------------------|
| Administrative Affairs              | The President                      |
| Admission                           | Director of Admissions             |
| Adult Basic Education               | Coordinator, Basic Skills Programs |
| Adult High School Program           | Coordinator, Basic Skills Programs |
| Entrance Procedures                 | Director of Admissions             |
| Evaluation of Credits               | Director of Admissions             |
| Financial and Business Affairs      | Vice-President – Business Affairs  |
| GED Exam                            | GED Examiner                       |
| Gifts and Bequests                  | The President                      |
| High School Program                 | Coordinator, Basic Programs        |
| Human Resources Development Program | mRecruiter, HRD                    |
| Industrial Training                 | Vice-President, Industry and       |
|                                     | Community Service                  |
| Job Placement Service               | Director of Student Placement      |
| Non-Credit Courses                  | Dean of Continuing Education       |
| Placement Testing                   | Director of Career Center          |
| Registration                        | Registrar                          |
| Student Activities                  | Director of Student Activities     |
| Student Affairs                     | Vice-President - Student Services  |
| Student Financial Aid               | Director of Financial Aid          |
| Transcripts                         | Registrar                          |
| Votorono Affoiro                    | Director of Voterana Affaire       |

#### **TABLE OF CONTENTS**

| Directory of Correspondence                       |     |
|---|-----|
| Calendar of Events 1993                           | 3   |
| Calendar of Events 1993-94                        |     |
| Calendar of Events 1994                           | 5   |
| Calendar of Events 1994-95                        |     |
| Calendar of Events 1995                           |     |
| Message from President                            | 8   |
| General Information                               |     |
| College Transfer Credit                           | 13  |
| Curriculum Programs of Study                      | 14  |
| Admissions  | 15  |
| Academic Regulations                              | 22  |
| Student Services                                  | 28  |
| Financial Information                             | 4   |
| Degree Credit Programs                            |     |
| Developmental Courses                             | 54  |
| College Transfer Programs (A.A. and A.S. Degrees) | 56  |
| Associate in General Education Degree             | /:  |
| Associate in Applied Science Degrees              | /\  |
| Associate Degree Nursing (Hegistered Nursing)     | /   |
| Communications Technology                         | 00  |
| Radiologic Technology                             | 9   |
| Accounting  | 94  |
| Business Administration                           | 100 |
| Microcomputer Systems Technology                  | 100 |
| Industrial Management                             | 100 |
| Administrative Office Technology                  | 100 |
| General Office                                    | 111 |
| Medical Office Technology                         | 115 |
| Fashion Merchandising and Marketing               | 115 |
| Real Estate (Technical Specialty)                 | 121 |
| Electronics Engineering Technology                | 123 |
| Diploma Credit Programs                           | 127 |
| Diploma Credit Programs                           | 128 |
| Auto Body Repair                                  | 131 |
| Auto Mechanics                                    | 133 |
| Residential Carpentry (Prison Program Only)       | 135 |
| Residential Carpentry (Prison Program Only)       | 137 |
| Electrical Installation                           | 138 |
| Food Service Specialist (Prison Program Only)     | 141 |
| Industrial Maintenance                            | 143 |
| Machinist   | 146 |
| Plumbing and Pipefitting (Prison Program Only)    | 149 |
| Welding Practical Nursing Education               | 151 |
| Practical Nursing Education                       | 153 |
| Course Descriptions                               | 155 |
| Non-Credit Programs                               | 191 |
| Industry and Community Services                   | 192 |
| Continuing Education                              | 192 |
| New Industry Training                             | 194 |
| Literacy Skills Program                           |     |
| Small Business Center                             |     |
| Learning Resources Center                         |     |
| Personnel of the College                          | 210 |
| Index   | 221 |

#### **SPRING QUARTER 1993**

| March 2  | Monday    | Orientation              |
|----------|-----------|--------------------------|
| March 5  |           | Registration             |
| March 9  |           | First Day of Classes     |
| March 11 | Wednesday | Late Registration Ends   |
| April 17 | Friday    | Holiday (no classes)     |
| May 5    | Tuesday   | No Classes               |
| May 6    | Wednesday | Last Day to Drop Courses |
| May 26   | Tuesday   | Spring Quarter Ends      |
| May 28   |           | Graduation               |

#### **SUMMER QUARTER 1993**

1st Session - 51/2 Weeks - June 4 - July 14 2nd Session - 51/2 Weeks - July 15 - August 20 11 Week Session - June 4 - August 20

| June 2 .  | Wednesday Registration                        |
|-----------|---|
| June 4    | FridayClasses Begin - 1st & 11 Week Sessions  |
| June 4    | FridayLate Registration                       |
| June 11   | FridayLast Day to Drop 1st & 11 Week Sessions |
| July 1    | Thursday Last day to Drop 1st Session         |
|           | and Not Receive a Grade of "F"                |
| July 2    | Friday Holiday (no classes)                   |
| July 14   | Wednesday End of 1st Session                  |
| July 15   | Thursday Classes Begin - 2nd Session          |
| July 15   | ThursdayLate Registration Ends - 2nd Session  |
| July 23   | FridayLast Day to Drop 2nd Session            |
|           | and receive ¾ Tuition Refund                  |
| July 30   | Friday Last Day to Drop 11 Week Session       |
|           | and Not Receive a Grade of "F"                |
| August 10 | TuesdayLast Day to Drop 2nd Session           |
|           | and Not Receive a Grade of "F"                |
| August 10 | TuesdayPre-Registration for Fall Quarter      |
| August 12 | Thursday Orientation for New Students         |
| August 20 | FridayQuarter Ends - 2nd & 11 Week Sessions   |
| August 20 | FridayGraduation                              |
|           |   |

#### **FALL QUARTER 1993**

| September 2<br>September 7<br>September 7<br>September 16<br>November 1<br>November 2<br>November 4<br>November 22 | Thursday Tuesday Tuesday Last Day to Day Monday Last Day to Drop  Tuesday Pre-Registration for Thursday Monday Orientation for Monday  | Classes Begin<br>Registration Ends<br>Prop and Receive<br>Tuition Refund<br>and Not Receive<br>a Grade of "F"<br>or Winter Quarter<br>or New Students |
|--|--|---|
|  | WINTER QUARTER 1993-1994   |   |
| November 23<br>November 29<br>November 29<br>December 8<br>December 17<br>January 3                                | Tuesday  | Classes Begin<br>Late Registration<br>frop and Receive<br>3 Tuition Refund<br>ins After Classes   |
| January 17<br>February 7   | Monday Martin Luther King Holi<br>Monday Last day to Drop  | iday (no classes)   |
| February 8<br>February 10<br>February 28   | TuesdayPre-Registration for ThursdayOrientation for Monday   | or New Students   |
|  | SPRING QUARTER 1994  |   |
| March 3<br>March 7<br>March 7<br>March 16  | Thursday   | Classes Begin<br>Late Registration  |
| April 4-5-6<br>April 7<br>May 3<br>May 4   | Monday/Tuesday/Wednesday   | Spring Break Classes Resume Summer Quarter  |
| May 5<br>May 25<br>May 26<br>May 27  | Thursday Orientation for Wednesday Staff Development of the | or New StudentsQuarter Ends nent (no classes)   |

#### **SUMMER QUARTER 1994**

1st Session - 51/2 Weeks - June 3 - July 13 2nd Session - 51/2 Weeks - July 14 - August 22 11 Week Session - June 3 - August 22

| June 1 Wednesday  | Session<br>Session<br>essions |
|---|-------------------------------|
| June 30 ThursdayLast Day to Drop 1st Session a Receive Grade    | and Not                       |
| July 1-4 Friday/Monday Summe                                    | r Break                       |
| July 13 WednesdayEnd of 1st                                     | Session                       |
| July 14 Thursday Classes Begin - 2nd                            | Session                       |
| July 14 Thursday Late Registration - 2nd                        | Session                       |
| July 22 FridayLast Day to Drop 2nd 3 and Receive 3 Tuition      | Session                       |
| August 2 Tuesday Last Day to Drop 11 Week S                     |                               |
| August 10 WednesdayLast Day to Drop 2nd 3 and Not Receive Grade |                               |
| August 16 TuesdayPre-Registration for Fall                      | Quarter                       |
| August 18 Thursday Orientation for New S                        |                               |
| August 22 MondayQuarter Ends - 2nd & 11 Week S                  | essions                       |
| August 23 TuesdayGra  |                               |

#### **FALL QUARTER 1994**

| Thursday                | Registration                  |
|-------------------------|-------------------------------|
| Monday                  | Classes Begin                 |
| Monday                  | Late Registration             |
| MondayLab               | or Day Holiday (no classes)   |
| WednesdayLa             | st Day to Drop and Receive    |
|                         | 3/3 Tuition Refund            |
| Sunday, Monday, Tuesday | Instructors Conference/Staff  |
|                         | Development (no classes)      |
| WednesdayLast Da        | ay to Drop and Not Receive    |
|                         | a Grade of "F"                |
| Tuesday Pre-Re          | gistration for Winter Quarter |
| Thursday O              | rientation for New Students   |
| Wednesday               | Quarter Ends                  |
|                         | Thursday                      |

#### **WINTER QUARTER 1994-95**

| November 17<br>November 24 & 25 |           | RegistrationThanksgiving                |
|---------------------------------|-----------|---|
| December 7                      |           | Last Day to Drop and Receive            |
| December 21                     |           | Winter Break Begins After Classes       |
| January 4                       | wednesday |   |
| January 16                      |           | Martin Luther King Holiday (no classes) |
| February 3                      | Friday    | Last Day to Drop and Not Receive        |
|                                 |           | a Grade of "F"                          |
| February 14                     |           | Pre-Registration for Spring Quarter     |
| February 16                     | Thursday  | Orientation for New Students            |
| February 24                     | Friday    | Quarter Ends                            |
|                                 |           |   |
|                                 | SPRING Q  | JARTER 1995                             |
| February 27                     | Monday    | Registration                            |
| March 1                         | Wednesday | Classes Begin                           |
| March 10                        | Friday    | Last Day to Drop and Receive            |
|                                 | •         | % Tuition Refund                        |
| April 12                        | Wednesday | Staff Development (no classes)          |
| April 13 & 14                   |           | Easter Break                            |
| April 28                        | Friday    | Last Day to Drop and Not Receive        |
| ,                               | ,         | a Grade of "F"                          |
| May 9                           | Tuesday   | Pre-Registration for Summer Quarter     |
| May 11                          |           | Orientation for New Students            |
| May 19                          |           | Quarter Ends                            |
| May 19                          |           | Graduation                              |

#### **SUMMER QUARTER 1995**

| May 29    | Monday    | Registration                      |
|-----------|-----------|-----------------------------------|
| May 31    |           | Classes Begin                     |
| May 31    | Wednesday | Late Registration                 |
| June 9    | Friday    | Last Day to Drop and              |
|           |           | Receive 3 Tuition Refund          |
| July 4    | Tuesday   | Holiday (no classes)              |
| July 27   | Thursday  | Last Day to Drop and              |
|           |           | Not Receive a Grade of "F"        |
| August 8  | Tuesday   | Pre-Registration for Fall Quarter |
| August 10 | Thursday  | Orientation for New Students      |
| August 17 | Thursday  | Quarter Ends                      |
| August 18 | Friday    | Graduation                        |



#### **MESSAGE FROM** THE PRESIDENT

As you enter our doors and walk across our campus, you will see Cleveland Community College is an exciting and rewarding experience for students. Cleveland's high quality faculty is dedicated to creating a dynamic learning environment in which you can pursue your highest aspirations.

A student at Cleveland has the opportunity to:

- \* Grow and develop as an individual
- \* Complete demanding academic courses
- \* Achieve your potential
- \* Attend cultural and social events
- \* Develop a life-long love of learning

Everyone at Cleveland is excited you have decided to pursue your education with us. We invite you to join with our faculty and staff in pursuit of educational excellence as you prepare for careers and leadership positions in the Twenty-first Century.

L. Steve Thornburg, Ed.D.

L. Steve Thombrug

#### HISTORY

The 1963 North Carolina General Assembly authorized a system of comprehensive community colleges, technical institutes, industrial education centers, and extension units to be established and placed under the jurisdiction of the State Board of Education.

The Cleveland Unit of Gaston College was established on July 1, 1965, as a result of the vision and effort of many individuals over several years. The Shelby Chamber of Commerce and the County Commissioners worked with the State Board of Education and Gaston College in establishing a unit of the college. Two buildings were rented by the County Commissioners at 118 North Morgan Street to start the school.

On July 11, 1965, James B. Petty was elected director of the Unit. The first classes began in September 1965, in the old Porter Brothers and McBrayer buildings. The number of classes and students has grown rapidly since that date.

On October 2, 1967, a local Board of Trustees was officially appointed and the Extension Unit became Cleveland County Technical Institute, a unit of the Department of Community Colleges of North Carolina.

In July 1969, the institute leased the County Home property at 137 South Post Road for a campus and moved to the new location.

Having secured a grant of \$500,000 from the Cleveland County Board of Commissioners and matched by a like amount from the State of North Carolina, architects were commissioned in 1972 to plan a long range building program on the present campus and the first two buildings for the new campus layout. The first two buildings were completed and placed in use for the Fall Quarter 1974.

In June 1977 the voters of Cleveland County approved a \$5,000,000 bond referendum to construct the next two phases of the long-range development plan for the campus.

Construction began in summer 1979 on these buildings to add approximately 100,000 additional square feet of permanent facilities including a new Learning Resources Center, classrooms, shops, laboratories, snack bar, bookstore, and offices. Shop additions were placed in use for Fall Quarter 1980. The main additional construction. known as the Campus Center Building, was placed in use in March 1981. Formal dedication was held October 18, 1981.

On March 3, 1980, the Cleveland County Board of Commissioners voted to concur with the request by the Board of Trustees for a name change of Cleveland County Technical Institute to Cleveland Technical College.

By action of the state legislature, effective July 1, 1987, the college was authorized to become Cleveland Community College and to offer

two-year college transfer programs. The first college transfer students were enrolled in the Fall Quarter 1987.

A Field House building was completed in July 1987 and became part of the college's physical education program.

Contracts were awarded in December 1987 for the construction of a new Student Activities Center building. This building was placed in use for Spring Quarter 1989. A Maintenance building was completed in August 1990. The James Broughton Petty Amphitheater was completed and dedicated April 24, 1991.

The founding president, Dr. James Petty, retired as President Emeritus on July 31, 1990. The College's second president, Dr. L. Steve Thornburg, assumed the presidency on August 1, 1990.

#### **PURPOSE**

Cleveland Community College is a two year public college whose purpose is to provide the adult citizens of Cleveland County with opportunities for personal growth and development. This purpose shall be pursued consistent with the philosophy of the "open door," which reflects the commitment of Cleveland Community College to help each student improve his or her education.

To fulfill this purpose the College will:

- Provide courses in the arts and sciences that will lead to an 1. associate degree transferable to other colleges and universities, fulfill related course requirements in certain occupational curricula or provide general educational enrichment.
- Provide a variety of one-year vocational and two-year technical 2. programs that reflect the changing needs of the business and industry in the local area.
- 3. Provide the opportunity for individuals to complete Adult Basic Education, High School Equivalency Programs, and General Educational Development Preparatory/Examination Program (GED).
- 4. Provide short term courses that will meet adult educational and community service needs.
- Provide guidance and counseling services that can assist stu-5. dents to better understand themselves and their career options.
- Provide cultural events and other enrichment activities to en-6. hance the quality of life in Cleveland County and surrounding areas.

#### **ACCREDITATION**

Cleveland Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees; The North Carolina State Board of Community Colleges; the American Medical Association for Radiologic Technology: The North Carolina State Board of Nursing for Licensed Practical Nursing; The North Carolina State Board of Nursing for Associate Degree Nursing.

#### VISITORS

Visitors need to receive permission from the switchboard receptionist prior to visiting classrooms, shops, or labs.

#### CHILDREN ON CAMPUS

Children under sixteen must be accompanied by an adult at all times. Children are not allowed in classrooms or in the gymnasium except for approved events.

#### NIGHT OFFERINGS

The College offers an extensive night program which includes most of the credit courses given in the daytime, as well as non-credit courses primarily for adult general interest or occupational upgrading or retraining.

The availability of credit courses at night allows the student who must work while attending school the opportunity to coordinate school activities with employment. A student may enroll for both day and night classes.

It is possible to complete all work toward a degree or diploma by attending at night. The rate of progress through a program will depend upon the number of courses taken each quarter. A reduced load will require a longer period to complete program requirements.

The College reserves the right to cancel any class, day or night, for which there is insufficient enrollment.

#### NOTICE OF COLLEGE REGULATIONS

The College has a genuine interest and concern for the integrity of all students; therefore all regulations found in this catalog, the student handbook, and announcements posted on bulletin boards will be followed by all students. Each student is responsible for becoming familiar with these publications and for reading official announcements in order to stay informed of current policies.

#### NON-DISCRIMINATION POLICY

From its founding Cleveland Community College's Board of Trustees and Staff have recognized the importance of equal opportunity in all phases of the College's operations and have adhered to a policy of non-discrimination on the basis of race, color, sex, age, religion, national origin, physical or mental disability, or other non-relevant factors. This policy continues to apply to both students and employees at all levels of the school's operations. Anyone who believes this policy has been violated may seek satisfaction through the Due Process procedures outlined in this catalog.

#### AMERICANS WITH DISABILITIES ACT

Cleveland Community College, in compliance with The Americans with Disabilities Act, does not discriminate and is dedicated to providing equal educational and employment opportunities for qualified adults. The College will make reasonable accommodations in its programs, services and facilities for disabled students and disabled employees who are otherwise qualified. Students with special needs should contact the Student Services Department for assistance.

#### CRIME AWARENESS/CAMPUS SECURITY ACT

Cleveland Community College, in compliance with The Crime Awareness/Campus Security Act, has developed policies and procedures on preventing and reporting on-and-off-campus crimes. Annually, the College widely distributes statistical data on reported criminal offenses in the Drug-Free and Crime Awareness Booklet. The Booklet is available in the Student Services Department.

#### SEXUAL HARASSMENT

The policy of Cleveland Community College, consistent with its effort to foster an environment of respect for the dignity and worth of all members of the college community, prohibits sexual harassment of students and employees of Cleveland Community College and views sexual harassment as unacceptable conduct which will not be tolerated. The policy, definition of, and complaint procedures can be found in the Cleveland Community College Policies and Procedures Manual and in the Student Handbook.

#### COLLEGE TRANSFER CREDIT **Areas of Study**

Cleveland Community College offers students the opportunity to complete the first two years of various four-year college or university general education requirements. For example, students interested in the areas of study listed below can spend their first two-years at Cleveland Community College qualifying for an associate degree and generally transfer to a four-year institution with junior class standing. A partial listing of areas of study whose prerequisites and/or lower division requirements may be met, in part or in full, at Cleveland Community College follows:

#### BUSINESS

Accounting **Business Administration Business Education** Computer Science

#### **EDUCATION** (Teaching)

Elementary Secondary Industrial Arts Physical Education Recreation Health

#### ENGINEERING

Aerospace Construction Industrial Chemical Civil Electrical Electronics Environmental Mechanical Nuclear

#### **ENGLISH**

Enalish Journalism

#### HUMANITIES

Art Liberal Arts Literature Religion Philosophy

#### MATHEMATICS

Mathematics Computer Science Statistics

#### MEDICAL RELATED

Dentistry Medicine Medical Technology Nursina Optometry Physical Therapy Pharmacy Veterinary Medicine

#### NATURAL SCIENCE

Agriculture Biology **Biochemistry** Conservation and Ecology Forestry Microbiology Physical Science **Physics Textiles** 

#### SOCIAL SCIENCES

Economics History Law Political Science Psychology

Social Work

Sociology

### **CURRICULUM PROGRAMS OF** STUDY

#### **COLLEGE TRANSFER (Degree Programs)**

#### **ASSOCIATE IN ARTS DEGREE**

**Pre-Business** 

Pre-Education: Early Childhood/Elementary Pre-Education: Intermediate/Secondary

Pre-Liberal Arts

#### ASSOCIATE IN SCIENCE DEGREE

Pre-Science

#### ASSOCIATE IN GENERAL EDUCATION DEGREE

**TECHNICAL (Degree Programs)** 

#### ASSOCIATE IN APPLIED SCIENCE DEGREE

Accounting

Administrative Office Technology

Associate Degree Nursing (RN)

**Business Administration** 

Communications Technology

Criminal Justice

Electronics Engineering Technology

Fashion Merchandising and Marketing

General Office

Industrial Management

Medical Office Technology

Microcomputer Systems Technology

Radiologic Technology

Real Estate (Technical Specialty)

#### **VOCATIONAL** (Diploma Programs)

Air Conditioning, Heating and Refrigeration

Auto Body Repair

**Auto Mechanics** 

Cosmetology (Certificate)

Electrical Installation

Food Service Specialist (Prison Program Only)

Industrial Maintenance

Machinist

Plumbing and Pipefitting (Prison Program Only)

Practical Nurse Education

Residential Carpentry (Prison Program Only)

Welding

(The College reserves the right to cancel any class or curriculum, day or night, for which there is insufficient enrollment.)

## **ADMISSIONS**

#### ADMISSIONS INFORMATION

#### **POLICY AND PROCEDURES**

Cleveland Community College operates under an "open door" admissions policy to offer college transfer, occupational and adult education to all persons who are able to profit from instruction. Placement of students in the various programs of instruction includes a special emphasis on career guidance and individual admissions counseling. The objective is to assist the student in establishing realistic goals to assure reasonable success in the particular program of instruction the student desires to pursue.

As part of the admissions process for curriculum students, placement tests may be required. Transcripts of previous education are required, and a personal interview is recommended with each student.

Application for admission forms and detailed information on programs of instruction offered may be secured by writing to: Student Services Office, Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28150 or by calling (704) 484-4099.

#### ADMISSIONS REQUIREMENTS FOR ALL **CURRICULUM PROGRAMS**

- Be at least eighteen years of age, or the applicant's high 1. school class must have graduated. Dual enrollment is allowed for high school students with quarterly permission of the high school principal.
- 2. High School graduation or its equivalent is required for the Practical Nursing curriculum and the Associate in Arts, Associate in Science, Associate in General Education and Associate in Applied Science degree curriculums.
- High School graduation or its equivalent is not required for 3. vocational-diploma curriculums or certificate programs.
- 4. All students enrolling in a curriculum program must have their high schools send an official transcript (showing graduation date or highest grade completed), or must present an official GED score of 225 or above, or a state-issued GED certificate.
- Applicants who are applying to the Associate in Arts, Associate 5. in Science, Associate in General Education, and the Associate in Applied Science degree programs must pass placement tests in English, mathematics, and reading.

#### **Exceptions:**

- a. Allied Health applicants must follow separate, previously-established qualitative and quantitative admission requirements. These applicants are required to meet the academic and technical standards of the Allied Health curriculums.
- Applicants (excluding Allied Health) who have scob. red 400 on the verbal section of the SAT are not required to take the English or reading placement test. Applicants who have scored 400 on the mathematics section of the SAT are not required to take the mathematics placement test.
- Applicants (excluding Allied Health) who have sco-C. red 17 on the American College Test are not required to take any placement test.
- Applicants (excluding Allied Health) who have d. earned at an accredited college or university at least 12 quarter hours or 9 semester hours of collegiatelevel course work with at least a grade of "C" on each course are not required to take placement tests.
- Applicants who transfer in a college-level mathee. matics course with a "C" or better are not required to take the math placement test. Applicants who transfer in a college-level English course with a "C" or better are not required to take the English or reading placement tests.
- f. Applicants (excluding Allied Health) who have successfully completed developmental mathematics, English, or reading courses at an accredited college or university are not required to take Cleveland Community College's placement tests or complete the developmental course(s).
- Special credit students (those who are not pursuing g. a degree or vocational diploma) are not required to take placement tests. Some courses do, however, require pre-requisites.

If the applicant does not pass the appropriate placement test(s) or meet exceptions as stated above, the applicant must enroll in and successfully complete the College's developmental course(s).

On acceptance, a complete physical and dental examination 6. is required for Practical Nurse Education and Associate Degree Nursing (RN) applicants. A complete physical examination is required for Radiologic Technology applicants.

- Applicants to Allied Health programs must have a personal 7. interview with an admissions office representative and a faculty member after PSB testing.
- Personal references are required for Allied Health programs. 8.
- The College reserves the right to refuse admission to a student 9 if it appears that such action is in the best interest of the College and/or the student. Any student so refused may appeal this action through Due Process.
- Specific procedures for admission to continuing education 10. programs will be found under that section of this catalog.

#### ADMISSION PROCEDURE FOR ALL CURRICULUM PROGRAMS

- Submit completed application form. Social Security number is 1. voluntary and is used for record-keeping purposes.
- Applicants are strongly encouraged to request a counseling 2. interview in Student Services. The interview is required for Allied Health applicants after PSB testing.
- Have official transcripts of all previous education (high school/ 3. GED and college) mailed to the College prior to the completion of the first quarter. The applicant who is not pursuing a diploma or degree does not have to have transcripts sent unless the transcript is needed to prove that course prerequisites have been satisfied.
- 4. Degree-seeking applicants must take placement tests in English, math and reading or must satisfy the exceptions stated in the Admissions Criteria.
- Receive a letter of acceptance from the Director of Admissions 5. prior to the end of the student's first quarter. Allied health applicants must be accepted prior to Fall Quarter registration.

#### PROVISIONAL ACCEPTANCE

Applicants for admission who have not submitted high school transcripts and/or GED scores and college transcripts before the beginning of the quarter for which entry is desired are granted provisional acceptance for one academic quarter. All admission requirements must be met within that quarter in order to be eligible to register for the following quarter. There is no provisional acceptance available for Allied Health applicants.

#### SPECIAL CREDIT CLASSIFICATIONS

Special credit students are those who are enrolled for course credit but not in a curriculum leading to the diploma or the associate degree. Students enrolled in this status will normally be required to meet the prerequisites for the course or to demonstrate a necessary level of competence although they do not have to meet the admission requirements for curriculum programs.

#### **AUDIT STUDENTS**

A student may elect to audit a course or courses. Those auditing receive no credit and do not have to take any examinations; otherwise, participation in class is on the same basis as a credit student. The fee for auditing is the same as the fee for credit. With the proper notification to Student Services and to the appropriate instructor, a student may change a course classification from credit to audit until the last three weeks of the quarter in which he/she is enrolled in the course. Students may change from audit to credit classification for an enrolled course during the add period only.

#### WITHDRAWAL

Students desiring withdrawal from the College should contact the Office of Student Services to complete necessary forms and procedures for official withdrawal. Withdrawal with a grade W will be allowed except during the final three weeks of a quarter. After that point a grade of F will be assigned.

#### READMISSION

Any student who officially withdraws from the College and later wishes readmission should contact the Student Services office. Readmission conditions will depend upon the individual circumstances, but generally a student is eligible to return at such time as an appropriate course schedule can be worked out. Students who wish to reapply to an Allied Health program must see the Director of Admissions. Students who qualify may be readmitted to the Practical Nurse or the Associate Degree Nursing program only once.

A former student will not be readmitted until all former and current expense obligations to any program or activity under the administrative jurisdiction of the College have been satisfied.

Students who have been academically suspended may enroll again after a one-quarter absence.

Any student who is financially indebted to the College by failure to completely meet any outstanding debt such as the following: bad check, tuition, bookstore, library, activity, graduation, parking fines, or any required payment to the College will not be eligible for readmission nor acquire any transcript until such indebtedness is completely cleared.

#### TRANSFER CREDIT TO CLEVELAND COMMUNITY COLLEGE

Cleveland Community College permits admission with transfer credit for students from member institutions of the North Carolina Department of Community Colleges and other accredited institutions.\*

Students must have official transcripts sent to Cleveland for evaluation prior to the end of the first quarter in which they are enrolled. Courses accepted for transfer credit must closely parallel those for which credit is sought at the College. Evaluation is made by the Registrar and appropriate academic Department Head as needed. Quality points do not transfer. Credit is given to courses in which a C or better was made. Transfer hours earned are converted from semester hours to quarter hours as necessary.

For degree completion in associate degree programs, at least 23 quarter hours must be earned at Cleveland. For a vocational diploma or certificate completion, at least 12 quarter hours must be earned at Cleveland.

\*Provided the transfer student was not suspended from the last institution attended for behavioral problems.

#### NOTIFICATION OF TRANSFER CREDIT

All transfer students will receive, prior to the completion of their first quarter, an "Evaluation of Transfer Credit" form denoting hours and courses accepted for transfer credit.

#### **CLEP**

Credit may be allowed for up to 31 quarter hours of college work based on appropriate scores on the CLEP General Examinations when appropriate to the student's program of study. CLEP subject examinations are evaluated individually if appropriate to the program of study.

#### MILITARY EXPERIENCE

Military training and experience may earn quarter hour credit as determined by the Registrar and appropriate department head or lead instructor. Course credit will be given if the learning experience or training closely resembles the student's program of study.

#### SERVICEMEMBERS OPPORTUNITY COLLEGES

Cleveland Community College has been designated as a member of the Servicemembers Opportunity Colleges (SOC) General Registry - a network of institutions sponsored by the American Association of State Colleges and Universities and the American Association of Community and Junior Colleges. Servicemembers are encouraged to take college level courses offered by accredited institutions and made available to military personnel through SOC. Records are evaluated, files are retained, counseling is provided, and recognition is given for learning through noninstitutional sources when appropriate. Transcripts

must be sent to the Director of Admissions directly from the institution offering the course.

#### TRANSFER OF CREDIT FROM A.A. AND A.S. DEGREE **PROGRAMS** TO OTHER COLLEGES AND UNIVERSITIES

A student who desires to transfer course work from Cleveland Community College's A.A. and A.S. degree programs to a four-year college or university should contact a transfer counselor in Student Services. The counselor will assist the student in the transfer process. Four-year college and university academic bulletins and transfer agreements are on file in Student Services.

#### TRANSFER CREDIT TO OTHER COLLEGES FROM TECHNICAL AND GENERAL EDUCATION PROGRAMS

Even though the technical degree programs are not planned as transfer programs, an increasing number of schools and colleges are accepting, for credit toward the bachelor's degree, course completed in a technical program or in the general education program at Cleveland Community College. Most of these colleges consider each applicant and his/her record individually, and the courses for which credit is sought must be similar to the course(s) offered by that institution. Some colleges give credit on the basis of examinations. Many colleges give full credit for the Associate in Applied Science degree or Associate in General Education degree toward a Bachelor of Arts, Bachelor of Science, or Bachelor of Technology.

For those students who desire to continue their education after graduation from Cleveland Community College, there are expanding opportunities to do so.

Some colleges will consider some transfer courses on an individual evaluation basis. Any student interested in pursuing that possibility should talk with the department chairman of the planned major field at the particular college to which transfer is desired.

#### TRANSFER RESPONSIBILITY

The College will cooperate with each student in planning a transfer program. However, it is the responsibility of the student to determine what courses and credit will transfer to the receiving institution.

The acceptance of courses taken at Cleveland Community College is determined solely by the institution to which the student transfers.

The student planning to transfer will have less difficulty if he/she will follow these steps:

- Decide early which senior college to attend. Contact the col-1. lege/university for recommendations concerning appropriate courses.
- Obtain a current copy of the catalog of that college and study 2. its entrance requirements and general education courses.
- Confer with a transcript counselor in Student Services and with 3. your academic advisor.
- Complete a transcript release form in Student Services. 4.

Changes in the student's major field of study or in the choice of a senior institution may result in transfer problems. Such changes should be made only after careful consultation with an advisor and Student Services counselor.

#### TRANSFER OF CREDIT WITHIN CLEVELAND COMMUNITY COLLEGE

Credit earned in any institutional degree program may be credited toward another degree or diploma program upon evaluation by the Director of Admissions. Credits earned in a diploma program are not usually acceptable to an associate degree program but may be credited toward a second diploma major. If graduation requirements change during the time a student is enrolled, the student may elect to satisfy the requirements in effect at the time of the original enrollment or the new requirements.

Any student who is currently enrolled or has graduated from a curriculum program of the College and wishes to transfer to another curriculum program must follow these procedures:

- Go to Student Services and update his/her application on file, 1. stating the new curriculum and quarter of entrance.
- Meet the admission requirements for the desired program as 2. stated in the College catalog.

Applicants will receive notification of admission by letter from the Director of Admissions along with an "Evaluation of Transfer Credit" form denoting hours for which credit will be given.

#### REGISTRATION

At registration, students will be assigned class schedules, pay fees, and purchase books. Each student is expected to register and begin classes on schedule. A student is not registered and cannot attend classes until tuition and fees are paid in the Business Office.

### ACADEMIC REGULATIONS

#### **DROP-ADD PERIOD**

Students may add courses and change their class schedules during the late registration period. Students may drop courses until the last three weeks of a quarter. If a student drops a course within the last three weeks of a quarter, he/she will receive a grade of (F) on the transcript.

All students must complete forms in Student Services to drop or add a course or change a class schedule.

#### **GRADING SYSTEM**

Grading the performance of students in course work is the responsibility of individual faculty members.

At the end of each quarter students will be evaluated in each course as follows:

| Letter | Numerical  |                                       |                       |
|--------|--|---------------------------------------|-----------------------|
| Grade  | Grade  | Explanation                           | Quality Points        |
| Α      | 93-100   | Excellent                             | 4 points per qtr./hr. |
| В      | 85-92  | Good                                  | 3 points per qtr./hr. |
| С      | 77-84  | Average                               | 2 points per qtr./hr. |
| D      | 70-76  | Below Average                         | 1 point per qtr./hr.  |
| F      | Below 70   | (No Credit)                           | 0 point per qtr./hr.  |
|        |  | Non-Completion of course requirements |                       |
| 1      | Work not   | Requirements must be                  | )                     |
|        | Completed  | completed in next quarter.            | .0 point per qtr./hr. |
| W      |  | Official Withdrawal                   | 0 point per qtr./hr.  |
| CE     |  | Credit by Exam                        | 0 point per qtr./hr.  |
| AU     |  | Audit                                 | 0 point per qtr./hr.  |
| S      | Satisfactory<br>(developmental<br>course only)<br>No Credit    | 0 point per qtr./hr.                  |                       |
| U      | Unsatisfactory<br>(developmental<br>courses only)<br>No Credit | 0 point per qtr./hr.                  |                       |
|        | No Credit  |                                       |                       |

Any student who receives an I may request to negotiate a written contract with the instructor involved. Contracts negotiated between the student and the instructor will specify a definite completion date for the requirements in addition to the types of activities set forth by the instructor to help the student achieve the minimum objectives of the course. If the student does not complete the minimum objectives in the time negotiated in the contract, the student will be dropped from

the course and (F) will be entered on the record. Upon completion of the contract in the specified time the instructor will notify the registrar to change the I to a letter grade. The contract completion date must be within the quarter following receipt of the I.

#### QUALITY POINT AVERAGE

The QPA is the most important example of a student's academic progress. The computation of a QPA is shown below as an example to simplify the average. It is determined by dividing the total number of quality points earned by the total number of quarter hours attempted, excluding I, W, CE, S, U, and AU grades. The cumulative QPA is based on all grades while a student is enrolled in a curriculum. The current QPA is an indication of one quarter of work in a curriculum.

#### EXAMPLE OF COMPUTING THE QPA

|                |       |                |   | QP per Cre | dit | Grade Points |
|----------------|-------|----------------|---|------------|-----|--------------|
| Course         | Grade | Hrs. Attempted |   | Hour       |     | Earned       |
| BUS 101        | Α     | 4              | = | x4         |     | 16           |
| BUS 115        | В     | 4              | = | х3         |     | 12           |
| CAS 101        | С     | 4              | = | x2         |     | 8            |
| BIO 101        | D     | _4             | = | x1         |     | _4           |
|                |       | 16             |   |            |     | 40           |
| Quality Points | S     | = QPA          |   | 40         | =   | 2.50         |
| Hours Attemp   | oted  |                |   | 16         |     |              |

#### QUARTERLY DEAN'S AND PRESIDENT'S LIST

Students who receive a 4.0 grade point average at the end of the quarter and are enrolled full-time will be on the President's List for that quarter. Students who receive a 3.5 to 3.99 grade point average at the end of the quarter and are enrolled full-time will be on the Dean's List for that quarter.

#### CLASS ATTENDANCE POLICY

Absences are a serious deterrent to good scholarship; it is impossible to receive instruction, obtain knowledge or gain skill when absent. Although there are numerous reasons for absences such as personal illness, death in the family, work conflicts, or unexpected emergencies, all absences will be counted in the 20% maximum. A student, who, during a quarter, incurs in any course an absence in excess of twenty per cent (20%) of the class hours, for that course may be dropped from the course (without credit).

Absences may be considered legitimate and eligible for make-up at the discretion of the instructor. The student is responsible for seeing the instructor, giving the reason for the absences, and requesting make-up assignment. This is to include students on rotating shift work schedules.

An instructor may refuse admission to class to any student who arrives more than ten minutes late to a class. One-half day's absence will be counted if a student leaves thirty minutes or more early.

The student may appeal any decision under these policies to the Due Process Committee.

#### ACADEMIC PROGRESS

The following cumulative grade point averages are the minimums which must be attained in order for a student to make reasonable progress toward graduation. A 2.00 grade average is required for graduation.

#### ASSOCIATE DEGREE PROGRAMS

| Cumulative Quarter Hours | Minimum Grade Point Average |
|--------------------------|-----------------------------|
| 0-24                     | 1.20                        |
| 25-48                    | 1.40                        |
| 49-72                    | 1.60                        |
| 73-96                    | 1.80                        |
|                          | (2.00 for A.A., A.S., or    |
|                          | A.G.E. Degree)              |
| 97 or more               | 2.00                        |

#### **VOCATIONAL DIPLOMA/CERTIFICATE PROGRAMS**

| 0-18       | 1.25 |
|------------|------|
| 19-36      | 1.50 |
| 37-54      | 1.75 |
| 55 or more | 2.00 |

Any student who falls below the specified minimum at the end of any quarter will be placed on academic probation for the following quarter.\* To be removed from probation the student must attain the appropriate minimum grade point average by the end of the probation quarter; otherwise, the student will be suspended from that program for at least one quarter.

Re-entry in cases of suspended students is handled on an individual basis. Suspended students should contact the Director of Admissions prior to re-enrolling.

<sup>\*</sup>In the Radiologic Technology program, every major specialty course must be passed each quarter before the student can enroll for the following quarter. In the ADN (Registered Nursing) and Practical Nursing programs, a grade of C must be made on every major specialty course each quarter before the student can enroll for the following quarter. Students in these programs who are academically ineligible to enroll for the following quarter may reapply for admission. ADN and Practical nursing students may be re-accepted only once. ADN students must earn a minimum grade of C on all Biology courses.

The privilege of appeal is provided to the suspended student. The student is required to write a letter to the Due Process Committee explaining the appeal and must appear before the Committee in person should the Committee so desire. The appeal may be carried to the Board of Trustees at the student's request.

#### COURSE REPEAT REGULATIONS

A curriculum course may not be repeated if the student received a grade higher than a D. If a D or F was received, the student may repeat the course one time. A student may audit a course in which a passing grade was received. A course may not be audited more than twice. Any exception must be approved by the appropriate department head.

#### **COURSE SUBSTITUTIONS**

Courses may be substituted with approval of the advisor, dean, or registrar.

#### CREDIT HOURS, CONTACT HOURS, AND COURSE LOAD

Each course listed is followed by a notation on the number of quarter hours credit it carries. Normally, the number of quarter hours earned is based on the number of class, laboratory or shop hours spent under the supervision of the course instructor per week for the quarter.

Usually one (1) quarter hour credit is given for each hour of class per week, for each two hours of laboratory work per week, or for each three hours of manipulative laboratory or shop per week.

Contact hours are the number of actual clock hours a student is in attendance during one week.

Students enrolled for 12 or more credit hours are classified as fulltime students. Students enrolled in less than 12 credit hours are classified as part-time.

Course load for veterans benefits is as follows: (1) for diploma vocational programs: full-time attendance equals 22 or more contact hours per week; 3/4 times attendance equals 16-21 contact hours per week; ½ time attendance equals 11-15 contact hours per week; (2) for degree programs: full-time attendance equals 12 or more credit hours per quarter; 3/4 time attendance equals 9-11 credit hours per quarter, ½ time attendance equals 6-8 credit hours per quarter. (For less than 1/2 time attendance in any program the VA does not pay a monthly allowance but will only pay the actual cost of tuition.)

#### ADVANCED PLACEMENT

Students who have taken advanced placement courses in high school and have made satisfactory scores on the College Board Advanced Placement Examination may receive credit for comparable

courses at Cleveland Community College. Students who wish to receive credit for advanced placement courses should contact the Reaistrar.

#### CREDIT BY PROFICIENCY EXAMINATION

A student may be allowed credit toward graduation for past schooling, work, or military experience through proficiency examinations. The student should confer with the appropriate Department Head for qualifications for these provisions and to be informed of the procedure to follow.

A grade symbol of CE (credit by examination) will be awarded for courses for which credit is given on the basis of proficiency examination. The course hours for such courses posted as CE will be computed toward graduation requirements but not for the computation of Honors, nor for computation of overall QPA.

#### CREDIT FOR EXPERIENTIAL LEARNING

Cleveland Community College endorses the concept of credit for experiential learning in recognition of valid learning experiences. Departments awarding credit will relate learning experiences to areas which are applicable to the degree/diploma program being completed. Credit is not extended automatically.

To receive credit for experiential learning, a student must submit a written request to the appropriate Dean. The Dean will ask the student to prepare a written report of experiences learned, to submit proof that the experiences did occur, to demonstrate by exam (if requested) skills learned. The Dean, in consultation with the Registrar/Director of Admissions, will grant full credit for a comparable course(s).

The student will receive hours earned on his official transcript - but no grade. The hours will be computed towards graduation requirements but not for the computation of honors nor the overall GPA. There is no charge for receiving this credit.

#### **GRADUATION HONORS**

To graduate with High Honors a student must earn a QPA of 3.8-4.0 in courses presented for graduation. To graduate with Honors a student must earn a QPA of 3.5-3.79 in all courses presented for graduation. To qualify for either honor, a student must not have received any grade lower than a C in the program being completed. If a student made a D or F in a course that was later repeated, the student is disqualified from graduating with honors.

#### **OUTSTANDING STUDENT AWARDS**

These awards are made to graduating students who have distinguished themselves by being most outstanding in terms of scholastic achievement, performance and maturity of purpose during the program of instruction at the College. Students may be recognized for each diploma and degree program.

#### REQUIREMENTS FOR GRADUATION

The following are established as minimum requirements for graduation from curriculum programs.

- Complete course requirements outlined by the curriculum pur-1. sued, and earn at least a 2.0 QPA in courses presented for graduation.
- Complete not less than 96 credit hours for the Associate in 2. Arts, Associate in Science, or Associate in General Education degree, 105-154 credit hours for the Associate in Applied Science degree, 66-79 credit hours for a vocational diploma.
- Meet with assigned faculty advisor no later than the third (3rd) 3. week of the guarter in which graduation requirements are expected to be completed and complete a graduation checklist which is to be submitted to the Registrar. The Registrar will make a complete check of the student's record and either notify the student that everything is in order or notify the student's academic advisor everything is not in order.
- A graduation fee is to be paid by the student before receiving 4. cap, gown, or diploma.
- Fulfill all financial obligations to the College and secure clear-5. ance from the Library.
- Be present for graduation exercises. Exceptions to this re-6. quirement, in case of unavoidable absences, may only be granted by the Vice President for Student Services.
- All prospective graduates from associate degree programs 7. must complete at least 23 quarter hours at the College before graduation. Vocational and certificate graduates must complete at least 12 hours at the College before graduation.

## STUDENT SERVICES

The *purpose* of the Student Services department at Cleveland Community College is to support the instructional programs, support instructional development, and to promote student development (academic, social, moral, physical) by offering a program of appropriate services for students from pre-admission to successful job placement or college transfer. In response to the needs of students, the Student Services department offers assistance to students as they develop self-direction in defining their educational, vocational and personal goals; in solving problems; and reaching their goals.

The basic *objectives* of the Student Services department at Cleveland Community College are built upon the stated purpose and goals of the College and upon the stated purpose of the department and the "open door" philosophy of The North Carolina Community College System.

- 1. To interpret the College's objectives, opportunities, and policies to prospective and enrolled students.
- 2. To assist in the implementation of the "open door" philosophy and its policies.
- 3. To assist the students in selecting, entering, progressing, and completing a program of study.
- 4. To provide a professional, competent, counseling program to assist students with academic, vocational, personal, social and economic problems.
- 5. To record, maintain, and make available to proper persons information regarding students.
- 6. To provide, develop, encourage, and evaluate student activities.
- 7. To encourage and assist in suitable job placement for currently-enrolled students, and all former students. Employers are invited to become involved.
- 8. To promote and encourage programs related to health, safety, social and physical welfare of students.
- 9. To provide for the continuous evaluation and improvement of all Student Services.
- 10. To support the stated purpose of the College.
- 11. To provide adequate programs of student financial aid, and veterans' affairs.
- 12. To provide counseling for college transfer students.

- To respond to the needs and welfare of students. 13.
- To establish meaningful associations among students, faculty 14. and the administration and provide opportunities for the development of individual potential.
- To seek qualified personnel with appropriate educational 15. backgrounds and experiences to staff the department.
- To establish a comprehensive organizational framework to ad-16. minister all the functions of the Student Services department.
- To provide opportunity and incentive for staff professional de-17. velopment, including in-service training, professional associations, and meetings.
- To establish, within the total administrative framework, specific 18. procedures for protecting students' rights and records.
- To provide the following student services' functions to best 19. support and contribute to the total student personnel program (recruitment, admissions, orientation, career guidance and counseling, academic placement testing, academic/personal counseling, financial aid and veterans' affairs, alumni activities, health information, extra-curricular activities, foreign students advising, handicapped student assistance, job placement, maintenance and security of student records, and student follow-up/tracking information.)

#### GENERAL INFORMATION

Student Services is generally open from 8:00 AM to 8:00 PM Monday through Thursday and from 8:00 AM to 4:00 PM on Fridays. Services are offered to all day and night, part-time and full-time students. A full program of student activities is offered. All students (including those off-campus) are encouraged to participate in all appropriate services. Services provided are listed above.

#### STUDENT'S ROLE AND PARTICIPATION IN INSTITUTIONAL DECISION-MAKING

All students are members of the Student Government Association. The president of the Student Government Association represents the student body on the Board of Trustees of the College as a non-voting member. The Student Government Association president is encouraged to offer comments and suggestions to the Board on institutional decision making. The Student Government Association president is also a member of the College Admissions Committee.

Students are also represented on other College committees, organizations, and clubs, such as:

Due Process Committee Financial Aid Committee Library Advisory Committee Student Clubs

#### PERSONAL COUNSELING AND ACADEMIC ADVISING

Counselors are available in Student Services to assist all students with educational and vocational problems and concerns. Students are assigned academic advisors to assist in planning academic programs and in developing the course schedule each quarter. Students in need of personal counseling will be referred to appropriate agencies.

## ACADEMIC PLACEMENT TESTING AND CAREER GUIDANCE/COUNSELING

In the Career Center, testing and guidance services are available for students, former students and the public at no charge to aid them in determining special interests and abilities that may be necessary for various careers. Users of the Center may take written assessment surveys or use a computer to help them decide which career to pursue.

Users of the Center may also take academic placement tests to help determine appropriate beginning courses in math, English, and reading. All tests and computer usage are scheduled through the Student Services department.

#### THE OFFICIAL ACADEMIC RECORD (TRANSCRIPT)

A transcript of grades earned each quarter is produced at the end of each quarter. A student may be placed on probation or suspended from a program of study for unsatisfactory work (as explained in the section on Academic Progress).

An official record of all the student's courses, credits, grades, current and cumulative Grade Point Average (transcript) is kept in the vault in the Department of Student Services. The student should occasionally review the transcript in Student Services. The record may also help determine eligibility for any club activity or club membership that requires specific scholastic standards. Copies of the official record are available to the student upon written request — at no charge.

Records of Progress are kept by Cleveland Community College on all students—including veterans. Progress records are furnished to students (including veterans) at the end of each quarter.

## POLICY ON RETENTION AND DISPOSAL OF CURRICULUM RECORDS

The retention and disposal of students' records at Cleveland Community College complies with the General Statutes of North Carolina as well as the North Carolina Community College System guidelines. Official transcripts are secured and kept permanently on file in Student Services in addition to computerized back-up. Other materials such as registration forms, high school and college transcripts are destroyed after five years.

#### RELEASE OF INFORMATION FROM OFFICIAL STUDENT RECORDS

The College recognizes the responsibility for maintaining records for each student to preserve authentic evidence of the events and actions that are important and can contribute to the efforts to educate the student and to facilitate the achievement of the educational goals of the College. The following general principles and procedures govern the release of information from student official records:

- Written consent from the student is required before a transcript or information may be released from the official, academic record. Exceptions are:
  - The Registrar may release information from official reca. ords including reports of academic directory information from student records which include the following: student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, dates of enrollment, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
  - The Registrar may release information pertaining to b. honor achievements for publications.
- A hold may be applied to the release of a transcript or other 2. information requested from an official record, for a student who has an overdue indebtedness to the College. Such a student continues to have the right to see the official record upon request.
- The use and release of information from student official rec-3. ords will be determined as outlined above and in compliance with state and federal legislation relating to such records. Action in situations that may not have been anticipated and/or defined above will at all times be based upon the best knowledge available to the professional staff of the College.

#### JOB PLACEMENT

Cleveland Community College maintains a placement service to help interested students and alumni find employment. The job placement office works with students individually in meeting their employment needs, whether it is full-time or part-time. Those students or alumni seeking employment should complete an application with the Job Placement Office in Student Services. Employers are regularly contacted to participate in Cleveland Community College's Job Placement opportunities.

#### STUDENT HOUSING

The College does not have dormitory accommodations available. Any student who needs to locate housing in Shelby should contact the local Chamber of Commerce who will provide a list of local realtors, a local map and other newcomer information.

#### **ORIENTATION**

All part-time and full-time new students and families are strongly encouraged to participate in a free orientation program in order to promote adjustment to the educational programs and services of the College. Orientation sessions are held quarterly for day and evening students prior to the beginning of the quarter.

#### THE CAREER DEVELOPMENT CENTER

Cleveland Community College maintains a career center to assist students, alumni, and the public with career needs such as choosing a suitable career, changing occupations, or finding a job. The Career Center utilizes CHOICES-CT Computer software and other written aptitude and interest surveys and materials at *no cost* to students, alumni, employers and the public. Contact the Director of Career Development in Student Services.

## POLICIES ON THE USE OF CLEVELAND COMMUNITY COLLEGE'S CAREER DEVELOPMENT CENTER

- All former and current Cleveland Community College students (degree and non-degree) may use the Career Development Center.
- 2. All employers and residents of Cleveland County may use the Career Development Center.
- 3. There is no charge to use the Career Development Center's services and materials.
- Interested Career Development Center users should contact the Student Services Department at Cleveland Community College to schedule its use. Appointments are strongly recommended.

#### **ALUMNI ASSOCIATION**

Each Cleveland Community College student receiving a diploma or degree is considered a member of the Alumni Association. The aim of the association is to keep former students informed of and involved in the College's growth, activities, and services. Alumni are encouraged to take advantage of job placement services. The Director of Student Activities is sponsor for the Alumni Association Committee.

#### STUDENT HEALTH

The College does not provide medical, hospital, or surgical services nor does the College assume responsibility for injuries incurred by students when taking part in intramural sports, class or student activities. Medical services are available at the emergency room of Cleveland Memorial Hospital. A doctor is on duty 24 hours a day in the emergency room. A first-aid kit is available at the visitor reception area. Student Services department provides programs on health education to interested students and staff. The College certifies and promotes a drug-free workplace and adheres to a communicable disease policy. Smoking is not allowed in any campus building.

#### DRUG-FREE WORKPLACE POLICY

Cleveland Community College, in compliance with the Omnibus Drug Initiative Act of 1988 (Public Law 100-690) and The Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226) certifies that the agency has adopted and implemented a program to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees. The College will:

- 1. Annually distribute, in writing, to each student and employee, standards of conduct that clearly prohibit the unlawful possession, use or distribution of illicit drugs and alcohol on campus property or as part of any campus activity.
- 2. Establish a drug-free awareness program to alert employees and students to the dangers of drug and alcohol abuse and make them aware of available drug counseling programs.
- 3. Require employees who know of a fellow worker's on-the-job use of drugs or alcohol to notify the employer.
- 4. Impose sanctions or require rehabilitation of an employee or student who is convicted of campus or workplace-based drug or alcohol abuse.

Cleveland Community College, in conjunction with CODAP (Community Organization for Drug Abuse Prevention), is engaged in a continuing campaign against substance abuse. A long-standing relationship between the college and CODAP facilitates the flow of information and referral. The program includes educational seminars and public awareness events.

Communications methods include:

- 1. Annual written notification
- 2. Information at orientation of new students
- 3. Emphasis during convocations
- Classroom units in appropriate courses 4.
- 5. Drug Awareness Days

Public access Cable Channel 22 provides TV coverage of inhouse as well as community material to support the drug abuse prevention and drug-free workplace programs at Cleveland Community College (i.e., public service announcements, teleconferences).

#### COMMUNICABLE DISEASE POLICY

Policies regarding communicable diseases at Cleveland Community College are as follows:

Persons infected with a communicable disease will not be excluded from enrollment or restricted in their access to college services or facilities unless medically-based judgments in individual cases establish that exclusion or restriction is necessary to the health and safety of the individual or to the health and safety of other members of the College community.

Any student, College employee (either full-time or part-time) and any employee of contractors or contracted services who knows or has reasonable basis for believing that he or she is infected with a communicable disease has the responsibility of reporting this fact, on a confidential basis, to the appropriate dean or vice president.

Persons who know or have reasonable basis for believing that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated ethically and legally to conduct themselves responsibly in accordance with such knowledge for the protection of other members of the community.

#### STUDENT ACTIVITIES

Cleveland Community College is interested in developing students to their fullest potential. The College strives to offer the utmost in academics as well as social, cultural and physical activities to help build a well-rounded person. Student activities offer every student an opportunity to make new friends and to help the academic community at large. All student activities are assisted and supported by the Student Government Association.

A number of clubs have been organized, and faculty and staff serve as advisors. No student will be excluded from membership in an organization because of race, creed, religion, sex, age, color, disability, or national origin. Dances and other special activities such as "Spring

Fest, Beach Blast, Fall Fling, Halloween Contest, Receptions, Intramural Softball Games, Intramural Volleyball and Basketball games" are sponsored periodically by the SGA for the enjoyment of all Cleveland Community College students. Students interested in forming new organizations should consult the SGA President and Director of Student Activities for assistance.

The Director of Student Activities is responsible for supervising the student activities program. Initial requests and plans come from the student body through the Student Government Association. Every effort is made, within the limited scope of financing and facilities, to conduct a comprehensive program of activities. Clubs and organizations are free to operate their organizations as they choose within the legal framework of college rules, and local and state laws. The SGA budget must be approved by the SGA President and college administration.

### ATHLETICS AND SPORTS

Intramural sports are encouraged and provided for students by the College. These include basketball, softball, volleyball, tennis, chess, checkers, and horseshoes. The College does not participate in intercollegiate sports.

### STUDENT PUBLICATIONS

Cleveland Community College encourages students to participate in the production of student publications. The College supports the student's right to express himself/herself through journalist endeavors which can contribute to an atmosphere of responsible discussion. Roles of student publications are to allow for student expression regarding the College - its mission, policies, programs, services, faculty, staff, facilities, student activities and events - and to keep students abreast of current events, rules, regulations, and to produce a magazine that accurately depicts the College.

1. Student Handbook - The Student Handbook is published annually by the Student Services department under the direction of the Director of Student Activities. The Handbook is distributed at orientations, registrations, and is available in Student Services at any time. The Handbook, in addition to the College catalog, serves as a student's guideline to College rules and regulations, services, College personnel, and student behavior (which covers student rights and responsibilities, code of conduct, jurisdiction of judicial bodies, disciplinary responsibilities of College officials, and disciplinary procedures, and appeal.

Campus Connection - The student magazine which is published twice a year. This publication is student driven through the SGA and under the supervision of the College photographer and the Director of Student Activities. The magazine keeps everyone up to date on student activities, College events and personnel.

### STUDENT CLUBS

Student clubs may be organized with the approval of the SGA and the Vice President for Student Services. These may be related to the vocational goals of the students, or may serve as civic organizations or special interest areas of the students.

Image Makers is a club organized to encourage student and staff interest in photography.

**LeClub de Espirit** is comprised of students within the Fashion Merchandising and Marketing Curriculum.

Gamma Beta Phi Honor Society is a national honor and service organization which emphasizes service, character, and scholarship. Memberships, based on a 3.50 grade point average and completion of 15 quarter hours, are extended twice a year.

Phi Beta Lambda is a national organization for students in the business curriculums. The purpose of PBL is to develop vocational competencies for business occupations.

Slightly Off Center Stage Players is made up of those students interested in dramatic productions.

**Black Awareness Club** promotes knowledge and appreciation of black history.

**Criminal Justice Club** promotes a better understanding of the criminal justice system through service and education and bridges the gap between the community and the system.

Media in Motion Club fosters interest and enthusiasm in the field of Communications Technology by providing professional and educational activities for its members.

In Transition is a college club designed to help college transfer students make the transition from community college to the four-year college/university.

**Lamplighters** is a club that promotes the high standards and ideals of the nursing profession.

Rotaract Club is a co-ed organization whose members engage in community and international service projects. The club is sponsored by the Shelby Rotary Club.

Students in Free Enterprise is a club which promotes a better understanding of and a greater appreciation for the free enterprise system. The club sponsors community projects which are presented at regional and national competitions.

#### STUDENT ACTIVITIES CENTER

The Student Activities Center is available to all currently-enrolled students for relaxation, recreation or interaction with other students or involvement with extra-curricular activities. The area is open from 8:00 a.m. - 10:00 p.m. Monday through Thursday and 8:00 a.m. - 4:00 p.m. on Friday. The Center comprises (1) student lounge, (2) weight room, (3) student lockers, and showers, (4) walking track, (5) meeting rooms, (6) holding kitchen, (7) classrooms, (8) art studio, (9) SGA office, (10) Gamma Beta Phi office. (11) restrooms, (12) gymnasium. Only Cleveland Community College students are permitted to use the gym and weight room. Any adult (18 or over) may use the walking track.

#### SNACK BAR

A variety of hot and cold foods are available in the campus Snack Bar. Hours of operation are from 7:00 a.m. - 1:30 p.m. and 2:30 p.m. - 9:00 p.m. Monday - Thursday, and Friday 7:00 a.m. - 2::00 p.m.

### STUDENT GOVERNMENT ASSOCIATION

All students are members of the Student Government Association. The Student Government Association at Cleveland Community College takes an active part in life at school. The purpose of this organization is:

- To represent the individual thinking, the integrity, the ideas, 1. and the interests of the students within Cleveland Community College.
- To encourage cooperation between students, faculty, and 2. administration.
- To sponsor activities or endeavors that will be of benefit to the 3. student body and Cleveland Community College.
- To do all things necessary to promote the welfare of the stu-4. dent body.

Officers of the Cleveland Community College SGA attend the North Carolina Comprehensive Community College Student Government Association meetings. This enables the students to meet new people and exchange ideas from different colleges for the enhancement of their respective organizations.

#### STUDENT BEHAVIOR

Students Rights and Responsibilities

The rights of students as citizens are acknowledged and reaffirmed. The College recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program. To this end, the College recognizes, declares, and vests certain rights in each student enrolled at the College.

Students are responsible for reading and understanding the College Catalog and Student Handbook. Students are responsible for acting as responsible adults for proper completion of their academic program, for familiarity with all requirements of the curriculum from which they intend to graduate, for maintaining the grade average required and at all times knowing their academic standing, and for meeting all other degree requirements. Their advisors will counsel them, but the final responsibility remains with the student. Students are required to keep the Office of Admissions/Registrar up to date on their current addresses and telephone numbers.

### Student Code Of Conduct And Jurisdiction Of Judicial Bodies Disciplinary Responsibilities Of College Officials, Disciplinary Procedures, And Appeal

It is expected that students will conduct themselves as responsible adults at all times. The College has an inherent responsibility to maintain order on its campus; therefore, students may be suspended or dismissed by the appropriate Vice President for behavior deemed incompatible with the mission, the regulation or responsibility of the College. Disruptive classroom behavior, destruction of school property, stealing, cheating, gambling, use of profane language, engaging in personal combat, possession of dangerous weapons, or the possession and/or use of alcoholic beverages and/or the use of any drug as defined under the North Carolina Controlled Substance Act. G.S. 90-89 through G.S. 90-94 in or on any part of the Cleveland Community College campus will not be tolerated. Any violation of these regulations will result in expulsion from the College. In addition, any infraction which is a violation of North Carolina law will be turned over to local authorities.

### Due Process Procedures On Grievances

- A student wishing to appeal any decision at the College should 1. first appeal the decision to the instructor or administrator making the decision.
- 2. If not satisfied, an appeal may be made in writing to the Due Process Committee which will recommend action to the President. The Vice-President For Student Services serves as Chairman of the Due Process Committee.
- Further appeal may be made directly to the President in writ-3. ing.

Final appeal would be made directly to the Board of Trustees 4. in writing. The Board will make a decision based on written appeal and the forwarded recommendations of the President and Due Process Committee.

#### **INCLEMENT WEATHER**

The College President will make the decision as to whether or not classes will be held during periods of inclement weather. Announcements will be made on local radio and television stations. If day classes are canceled, night classes are automatically canceled.

### COOPERATIVE EDUCATION

Cooperative Education (Co-op) is designed to give students enrolled in many programs within the College a chance to work on a job while completing their degrees. This combination of classroom instruction with practical/related work experience provides numerous benefits to participating students.

ELIGIBILITY. Any full-time students who are enrolled in programs offering Co-op for academic credit and who have earned a minimum of 12 hours toward their degree requirements are eligible to participate, if they meet the following conditions:

- Approval of instructor coordinator (1)
- Have a minimum of 2.0 GPA (2)
- Approval from program director (3)

ACADEMIC CREDIT. Credit hours for Cooperative Education work periods are determined by dividing the average number of hours worked per week by 10 and rounding to the nearest whole number. Co-op students may earn from two to twelve quarter hours of Co-op credit toward their degree requirements. (See individual curriculum programs for number of elective hours available.)

### STUDENTS OF THE QUARTER

Each quarter the faculty selects one outstanding student as the "Student of the Quarter" for each academic division - College Transfer, Technical, and Vocational. These students receive a certificate and local newspapers publish their pictures.

### WHO'S WHO AMONG STUDENTS IN AMERICAN JUNIOR **COLLEGES**

Each academic year, the faculty selects students for inclusion in the nationally-recognized Who's Who Among Students In American Junior Colleges. These students are selected because of their outstanding performance in academics, extracurricular activities, or community services.



# FINANCIAL INFORMATION

Cleveland Community College operates on the quarter system. Each quarter is eleven weeks in length. Students pursuing a program of study are required to register and pay all fees at the beginning of each quarter. A student is not registered until tuition and fees are paid in the Business Office. Every effort is made to keep the student's expenses at a minimum. Tuition cost is set by the State Board of Community Colleges and is subject to change.

### TUITION

Current rates for all college transfer, general education, technical or vocational curriculum students.\*

#### North Carolina Students:

14 or more credit hours 185.50 Less than 14 credit hours (per quarter hour) 13.25 Out-of-State Students: 14 or more credit hours 1505.00

Less than 14 credit hours (per quarter hour) 107.50

\*If accident insurance is desired, contact the Division of Business Affairs for up-to-date information.

### FINANCIAL RESPONSIBILITY

Students are not permitted to default in the payment of fees, fines, loans, or other financial obligations due the school. All tuition, fees, and any other expenses must be paid prior to entering class. Any deviation from this policy must be approved by the President of the College.

#### RESIDENCE STATUS FOR TUITION PAYMENT

General Statute 116-143.1(b) passed by the 1973 General Assembly of North Carolina reads:

"To qualify for in-state tuition a legal resident must have maintained his domicile in North Carolina for at least 12 months immediately prior to his classification as resident for tuition purposes. In order to be eligible for such classification, the individual must establish that his or her presence in the State during such twelve-month period was for the purposes of

maintaining bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education; further (1) if the parents (or courtappointed legal guardian) of the individual seeking resident classification are (is) bona fide domiciliaries of this State, this fact shall be prima facie evidence of domiciliary status of the individual applicant and (2) if such parents or guardian are not bona fide domiciliaries of this State, this fact shall be prima facie evidence of non-domiciliary status of the individual.

Regulations concerning the classification of students by resi-2. dence for purposes of applicable tuition differentials, are set forth in detail in A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. Each enrolled student is responsible for the contents of that Manual, which is the controlling administrative statement of policy on this subject. Copies of the Manual are available on request at Student Services.

### **BOOKS, SUPPLIES, AND BOOKSTORE**

A student is required to buy the necessary textbooks and supplies. An average cost of books will vary from \$60 to \$150 per quarter, depending on the curriculum and number of courses taken. Books and supplies are sold during regular bookstore hours.

### STUDENT INSURANCE

Certain risks are inherent in any work involving regular contact with mechanical and electrical equipment. While stringent precautions will be taken to insure safety, it is felt to be in the interest of all students to provide some measure of insurance protection.

A group policy, providing the desired insurance protection, is available through the Business Office. The cost of the insurance is approximately \$7.50 per year. If you are not already covered by accident insurance we strongly recommend this policy to you.

Any accident, regardless of how minor it may be, must be reported to the instructor in the area. The policy is limited to coverage, both in the time period covered and the amounts provided for each accident. Information concerning the policy and coverage is distributed during each registration period and is also available in Student Services. Claims for accidents should be turned in at Student Services.

Personal liability insurance is required of all Practical Nursing, ADN and Radiologic Technology students. The cost of coverage is \$14.50 per year.

#### GRADUATION FEE

All students eligible to graduate from a curriculum program will be required to pay a graduation fee (approximately \$15.00) one month prior to the time they are to complete their programs.

### STUDENT ACTIVITY FEE

All students enrolled for seven or more credit hours are required to pay a student activity fee of \$10.00 each Fall and \$9.00 for the Winter and Spring guarters. Students enrolled for less than seven credit hours will pay a student activity fee of \$5.00 for the Fall, Winter, and Spring quarters. The Student Government Association budgets this money yearly with the approval of the Administration. Included in the budgeting are the following items: Paw Prints, men's and women's athletics, intramurals, fall, spring, and summer festivals, SGA dues and conventions, ID cards, parking stickers, and other student related activities.

### CHARGE FOR RETURNED BANK CHECKS

There will be a charge of \$5.00 assessed any student who gives the College a bank check which is returned from the bank because of insufficient funds.

### REFUND POLICY

Tuition refunds may be authorized only in the event that the student must withdraw for unavoidable reasons. In such cases, two-thirds of the tuition paid may be refunded if the student withdraws within ten days after the first day of classes as published in the Calendar of Events. Tuition refunds will not be considered after that time.

Tuition refunds will not be made for tuition of \$5.00 or less. Refunds will not be made to students enrolled in short-term, non-credit classes, activity fees, or for accident insurance fees. Full refund will be made should the College cancel a class or program. Refund checks are normally issued three weeks after the close of late registration.

### PARKING (MOTOR VEHICLE AND TRAFFIC REGULATIONS FOR CLEVELAND COMMUNITY COLLEGE)

#### I. General Information

The control and enforcement of motor vehicle conduct is necessary both for the safety of the individual and the efficient operation of Cleveland Community College.

A. In the following information the term campus shall refer to that property operated by Cleveland Community College and those other properties when used by Cleveland for educational purposes.

- B. The term motor vehicle shall include all vehicles which are covered by the motor vehicle laws of North Carolina.
- C. No student with an outstanding traffic infraction may receive end-of-quarter grades until receiving clearance from the Campus Security Committee and paying all fines.
- D. Student parking is in the large lot on the fairgraound side of the campus.

#### Registration of Vehicles 11.

- A. All faculty, staff and students, part-time and full-time, shall be required to have their vehicle or vehicles registered by the business office and to affix an appropriate decal on the driver's side of the rear window (inside). There shall be no charge to register vehicles.
- B. Campus visitors, law enforcement vehicles, and service vehicles are specifically exempted from registering their vehicles. However they are expected to obey all other regulations.

### III. Regulations

- A. It shall be the responsibility of the Campus Security Committee to recommend traffic regulations to the President of the College for presentation to the Board of Trustees for approval.
- B. Enforcement of regulations shall be administered by the Campus Security Committee.
- C. Those students assessed fines shall pay those to the Campus Business Office (For redress, see part IV.)
- D. The following shall be considered violations of campus motor vehicle regulations and the corresponding fine:
  - 1. Vehicle showing no registration.....\$5.00
  - 2. Parking in improper area ......3.00
  - 3. Parking by backing vehicle into area......1.00 4. Double parking or blocking a legally parked vehicle .....3.00
  - 5. Speeding in excess of 10 m.p.h......3.00
  - 6. Failure to yield right-of-way to pedestrian ......3.00
  - 7. Reckless driving .......5.00
- E. This College reserves the right to remove any illegally parked vehicle by a College vehicle, privately owned wrecker, or other means. The violator shall be responsible for any tow charge in addition to the violation fee.
- F. The registered operator is responsible for the use of the vehicle.

#### IV. Redress

- A. A committee shall be made to exist which will be known as the Campus Security and Traffic Committee.
- B. It shall be the responsibility of this committee to determine final disposition of fines for which anyone may feel that he/she was unnecessarily charged.

- C. This committee shall be composed of the following:
  - 1. One member of the Campus Security Committee, not the chairman.
  - 2. One member of the Campus Safety Committee, not the chair-
  - 3. One member of the Student Government Association, not the president.
- V. The Campus Security Committee shall have power to recommend changes in the above regulations provided the change is properly communicated to the administration, faculty, staff, and students of Cleveland Community College.

### FINANCIAL AID INFORMATION

The fundamental purpose of the Financial Aid Program at Cleveland Community College is to provide financial assistance, based on financial need, to students who normally could not attend post-secondary school without aid. Financial aid at Cleveland is based on a needs analysis. The student may complete any of the approved needs analysis forms to apply for financial aid. These forms are the Financial Aid Form (FAF), the Family Financial Statement (FFS), or the Application for Federal Student Aid. Cleveland Community College prefers that the student use the FFS form. The forms may be picked up in the Financial Aid Office. For aid other than the Pell Grant, additional forms may be reauired.

In accordance with the Omnibus Drug Initiative Act of 1988, as a precondition to receive Federally funded financial aid, (e.g., Pell Grant, Campus Based Programs) each student receiving assistance must certify that he or she will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance during the period of enrollment covered by a grant. If convicted of a drug related Federal or State offense, the institution must withhold any further Title IV payments to the student until determination by the appropriate authority is made regarding fraud on the part of the student.

- Financial aid at Cleveland Community College consists of scholarships, grants, loans, work study or any combination of these as determined by the financial aid office.
- The student or the family of the student has the primary responsibility for post-secondary educational cost. Financial aid awarded by the College is based on the need of the student to supplement the family or student contributions.
- Recipients of financial aid who withdraw from the College must personally notify the Financial Aid Office of this action. Also, any changes in name, marital status, address, academic program, or enrollment status must be reported to the Financial Aid office.

- The primary purpose of financial aid is to assist the student in receiving an education. To be assured of continued financial aid, students must maintain "satisfactory progress" in accordance with the College's grading policy, listed in the catalog under "Academic Progress" and completing one-half or more of work attempted.
- Any commitment of federal funds (Pell Grant, SEOG, CWS, NCSIG) is tentative and contingent upon subsequent Congressional appropriation and actual receipt of funds by Cleveland Community College.
- The Financial Aid Office reserves the right, on behalf of the College, to review and adjust or cancel an award any time there is indication of changes in financial status, academic program, good academic standing, or failure to observe reasonable standards of conduct.
- Recipients of financial aid from the College are to notify the Financial Aid Office of any other financial aid extended to them from sources outside the College prior to acceptance of outside aid.
- Most student aid is based on full-time status; 9-11 credit hours for 3/4 time status, and 6-8 credit hours for 1/2 time status. Student aid is not usually paid for less than ½ enrollment.

#### APPLICATION PROCESS

All applicants for financial aid at Cleveland Community College shall have completed and mailed to the Processing Center the Family Financial Statement (FFS) or the other standard need analysis document approved by Cleveland Community College. All students shall apply for the Pell Grant if they wish to be considered for other federal, state, or institutional financial aid that is based on need. Students are encouraged to complete the application process as soon as income taxes and reports are filed or the source of income has been verified. In addition to verification of income, whether taxable or non-taxable, students may be requested to verify or document federal income taxes paid, number in household, number attending post-secondary institutions, and independent student status. Students should mail the FFS on or before the first of July to insure completion of the application process prior to Fall Quarter. Students completing and mailing the FFS needs analysis applications on the day of registration are not awarded their grant until the application process is complete.

### SATISFACTORY PROGRESS STANDARDS FOR FINANCIAL AID

#### Introduction

The Higher Education Act of 1965, as amended by Congress in 1980, mandates institutions of higher education to establish minimum standards of "satisfactory progress" for students receiving financial aid. For the purpose of maintaining a consistent policy for all students

receiving financial aid administered by the college's Financial Aid Office, these standards are applicable to all financial aid programs, including all Federally sponsored Title IV programs.

### Satisfactory Progress Defined

To continue to receive financial aid, a student must demonstrate satisfactory progress as defined below.

- Satisfactory progress for Financial Aid at Cleveland Commu-1) nity College is defined as any student in good academic standing, not on academic probation, and who has completed onehalf (1/2) or more of the work registered for the previous quarter.
- Continuing students applying for financial assistance (Title IV 2) funds which include Pell Grant, Supplemental Educational Opportunity Grant, College Work-Study, and State Student Incentive Grant) will be evaluated each fall quarter to determine, by the Standards of Satisfactory Progress, whether the student has successfully completed the minimum percentage of work toward his/her objective, degree, or certificate. Other students entering during the same academic year mentioned above will be evaluated by the FAO the entering quarter.
- 3) The maximum time frame a full-time student would have to complete his/her course should be:

3 years or 12 quarters for degree programs

1½ years or 6 quarters for vocational programs

A half-time or three quarter student must satisfactorily complete the appropriate fraction of maximum hours established for completion of his/her work.

Students registered under the Special Credit Program are 4) NOT eligible for the Title IV Program.

If a curriculum student is placed on academic probation or suspension for the first time and applies for admission as a "new" student in another program, the financial aid award is terminated. The student may re-establish eligibility for the federal student aid funds after attending one or more quarters and removing the academic probation, when suspended, or attend one quarter with good standing in a new program when suspended.

Re-entry status is determined by internal evaluation and transfer of credit. After the re-entry quarter, the first definition of satisfactory progress applies.

### TYPES OF FINANCIAL ASSISTANCE

All Financial Aid programs fall into one of two categories: grants, or employment. Grants are outright gifts of money and do not have to be repaid. Scholarships are also considered gift aids. Employment allows the student to work and earn needed money.

Application procedures and eligibility requirements, as stated in the academic bulletin, apply for any program. Students having a 4-year degree may apply for any program except Pell Grant and SEOG.

### **GRANTS**

### Pell Grant

All financial aid applicants are required to apply for the Pell Grant. The Pell Grant is a federal student aid entitlement program which provides a foundation of financial assistance to which other forms of aid may be added.

The U.S. Department of Education determines the student's eligibility for financial aid based on a formula developed annually and reviewed by Congress. This formula is applied consistently to all applicants and takes into account income, assets, family size, etc. The formula uses the information provided on the application to produce an eligibility index number which determines the amount of aid to be received. The Student Aid Report (SAR) will be mailed directly to the student approximately 4 to 6 weeks after submitting the application. The SAR should be brought immediately to the Financial Aid Office.

## Supplemental Education Opportunity Grant (SEOG)

SEOG is also a federal program. However, it is not an entitlement program like the Pell Grant. Recipients are determined by the Director of Financial Aid who awards the grant according to the exceptional financial need of the student. The amount of the award is determined according to the family income and their ability to assist the student.

### North Carolina Student Incentive Grant (NCSIG)

These grants are available to legal North Carolina residents who are full-time students in good standing with Cleveland Community College and have a demonstrated need. Amounts are determined by the student's financial need in relation to available resources and the cost of education. Grants may range up to \$2000 per academic year, but may not exceed one-half the cost of unmet need. Repayment is not required.

### Job Training Partnership Act (JTPA)

JTPA is a federally funded, skill development program for economically disadvantaged students. Application and recipient selection is processed through the Isothermal Planning Commission.

#### **EMPLOYMENT**

### College Work-Study Program (CWS)

A work-study program is awarded to students (enrolled at least halftime) demonstrating an unmet need beyond Pell Grant. This program allows students to earn a portion of the cost of their education. Workstudy participants will work a supervised schedule, usually 8-12 hours per week. Job descriptions outline the responsibilities of the assigned work-study.

#### SCHOLARSHIP PROGRAMS

Gamma Beta Phi Scholarship - The Gamma Beta Phi offers a scholarship of one hundred dollars per quarter to a worthy student. Students interested in applying for this scholarship should do so at the Financial Aid Office.

NC Community College Scholarship Program - To qualify as a candidate for these scholarships, a person would have to meet the established criteria. A copy of the eligibility criteria is available in the Financial Aid Office. Applications must be submitted to the FAO and selection is determined by the scholarship committee.

The Wachovia Technical Scholarship is awarded annually to a student who is enrolled full-time in the second year of a technical curriculum and is based on need and scholastic promise.

The Southern Bell Scholarship is awarded annually to two NC resident students who are enrolled full-time in a course of study leading to a degree or diploma. The recipient must maintain academic progress and continue enrollment at Cleveland Community College. Financial need receives top priority.

The Clyde Cash Memorial Scholarship - established December 1981, in memory of Clyde Cash, chemistry instructor, provides annual scholarship awards to graduating seniors from Cleveland County High Schools.

The Robert Hoover Memorial Scholarship Fund — established June, 1982, in memory of Bob Hoover, English instructor, provides annual scholarship awards to graduating seniors from Cleveland County High Schools.

The Ruth Anthony Memorial Scholarship - established May, 1984, in memory of Ruth Anthony, professional businesswoman for Fields Young, Inc., provides an annual scholarship to a person applying for admission to a secretarial science curriculum, at Cleveland Community College. The recipient must exhibit the desire and ability to be the best professional secretary possible. The Financial Aid Committee will select the recipient based on need, interest, aptitude, and department recommendation. Applications must be submitted to the Financial Aid Office by April 1.

The Fraley Scholarship is awarded annually to two students from either Industrial Management or Business Administration. Applications and recommendations must be submitted to the FAO and selection is determined by the scholarship committee.

The Vision Cable Scholarship is sponsored through a joint effort by Vision Cable of Shelby and the Media in Motion Club of Cleveland Community College. This is a merit based scholarship with nominations coming from the Communications Technology staff according to established criteria. The Scholarship Committee will make scholarship selection.

Violet Thomas Memorial Scholarship is a limited scholarship-partial funding for drama student(s). Awards are made by the dean of Arts, Sciences, and Public Services.

Vocational Rehabilitation - Students with mental, physical or emotional handicaps which limit employment opportunities may be eligible. For information, students should contact the nearest Vocational Rehabilitation Services, Shelby, NC 28150.

### Other Sources

American Business Women's Club Scholarship Cleveland County Negro Women's Club Scholarship Cleveland Memorial Hospital Auxiliary Scholarship

Students interested in the above should contact the appropriate agency. The Financial Aid Office assists in directing students to these agencies.

Scholarship recipients are expected to be full-time students with financial need. Students selected for scholarships who withdraw/drop courses must notify the FAO. The reason for withdrawing/dropping courses will be evaluated to see if the scholarship should be forfeited. Replacement for the scholarship is at the discretion of the FAO. This recipient will be selected from the pool of candidates interviewed for the original scholarships.

### Veterans, National Guard and Reserve Programs

N.C. National Guard Tuition Assistance Programs (NCNG) -Tuition assistance is available for members of the North Carolina National Guard. Applications are available at guard units and the Office of the Adjutant General, P.O. Drawer 2628, Raleigh, NC 27611.

Veterans Benefits - Cleveland Community College is approved for eligible veterans and wives, widows and children of disabled or deceased veterans. Applications may be obtained at the CCC Veteran's Office or the nearest county Veterans Office.

Veterans and War Orphans Grant - These grants are available to immediate family members of deceased or disabled veterans (service connected). Families of POW's and MIA's classified as such for

ninety days are eligible. Students should contact: Division of Veterans Affairs, P.O. Box 26206, Raleigh, NC 27611.

North Carolina Reservist Benefits - Tuition and benefits may be obtained through the Reserve.

#### **Veterans Affairs**

The Office of Veterans Affairs provides information and assistance to eligible veterans and dependents of disabled or deceased veterans in applying for educational benefits.

To be eligible for educational benefits, the student must be enrolled in an approved curriculum, taking only those courses required for graduation in the chosen curriculum. Students must, in the judgment of the College, maintain satisfactory progress for continued eligibility.

VA regulations governing institution-approved training of veterans and/or dependents of veterans require that certain documents be on file prior to certification of enrollment:

- 1. Application for admission;
- 2. Proper application for VA benefits (Forms 22-1990, 22-5490, or 28-1990):
- High school transcript or GED scores and transcript of aca-3. demic record for each college previously attended;
- If no VA benefits have been received for prior training; 4.
  - DD-214 (a)
  - marriage certificate (if applicable) (b)
  - divorce decree (if applicable) (c)
  - dependent children's birth certificates (if applica-(d) ble)
- If VA benefits have been received for prior training, the student 5. submits a change of program form (22-1995).

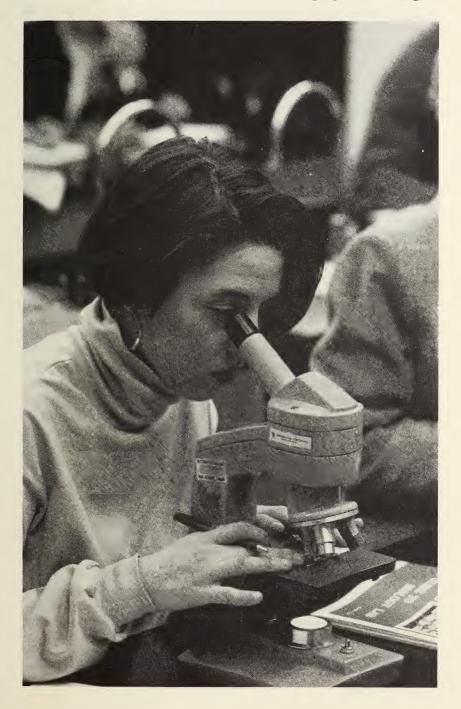
The VA will not approve for enrollment any of the following: (1) course audits (2) independent study (3) telecourses (4) repeated courses previously passed (5) courses not required in chosen curriculum.

- Work experience 6.
- 7. More than 2 course substitutions per curriculum.

The NC Student Loan Program for Health, Science, and Mathematics - The purpose of this loan program is to provide financial assistance to and encourage North Carolinians who desire to pursue career opportunities in the health, science, and mathematics disciplines. The General Assembly makes available appropriations for loans for the instructional programs of Radiologic Technology, Microcomputer Systems Technology, and Electronic Engineering Technology at Cleveland Community College.

NC Vocational Technical Student Loan Program — This loan program established April, 1984, makes funds available for loans to students enrolled in the vocational and technical curriculums. A student may borrow a maximum of \$300 each academic year under this program.

## **DEGREE CREDIT PROGRAMS**



## **Developmental Courses**

May be required for degree-seeking students. See admission reauirements.

Developmental courses are designed to provide instruction in the basic skills in order that the student will be successful in regular, collegiate-level courses. These courses earn credit hours for the quarter in which they are taken but do not count towards graduation. Students earn satisfactory (S) or unsatisfactory (U) grades. These grades are not computed into grade point averages. These courses may be taken concurrently with other courses except that they must be passed with a grade of (S) before the students can enroll in higher level English, reading, and math courses.

|     |      |                         |       | HOURS |        |  |
|-----|------|-------------------------|-------|-------|--------|--|
|     |      |                         | CLASS | LAB   | CREDIT |  |
|     |      |                         |       |       |        |  |
| ENG | 0100 | Basic English Skills    | 3     | 0     | 3      |  |
| MAT | 0100 | Basic Mathematic Skills | 4     | 0     | 4      |  |
| RED | 0100 | Basic Reading Skills    | 3     | 0     | 3      |  |

### COLLEGE TRANSFER PROGRAM

A large number of students plan their programs in order to eventually transfer to four-year colleges and universities. Students enroll in what is usually referred to as the transfer, curriculum which offers courses that parallel those offered during the first two years at a fouryear institution. Most of the credits earned in this curriculum may be transferred to colleges and universities as the first and second years of a baccalaureate degree program.

Cleveland Community College's transfer program includes many courses designed to prepare students for upper division study in such fields as business, education, engineering, dentistry, law, and medicine. A specially designed general transfer sequence of courses (Pre-Liberal Arts or Pre-Science) is also available for students who have not yet decided upon a major, but who intend to transfer their credits toward a four-year degree.

Students who plan to transfer to a four-year college or university are advised to give careful attention to several important considerations:

The transferability of courses taken at Cleveland Community 1. College is determined solely by the institution to which the student transfers. Curricula and courses have been developed to facilitate transfer of credits. However, some four-year institutions have specific requirements which warrant special attention.

- Students are responsible for meeting the entrance require-2. ments of the institution to which they plan to transfer. Students should work with their faculty advisors to ensure that they take courses which enable them to meet these requirements.
- Completion time for college transfer studies will be longer than 3. six or seven quarters if the student needs to enroll in developmental courses.
- 4. Due to course schedules and personal situations, night students will usually need longer periods than two years to complete their studies.

Students enrolled in the college transfer program will earn the Associate in Arts or Associate in Science degree after completing the prescribed 96 credit hours (quarter hours) of study.

Upon completion of liberal arts programs, the student should:

- Write and speak with clarity and precision, in keeping with the 1. rules of standard English.
- Read and interpret literature critically and analytically. 2.
- 3. Write critically and analytically in response to literary themes and ideas.
- Understand the relationship between the history of western 4. civilization and one's culture.
- Understand the meaning of the "multicultural" approach to 5. history.
- Understand sociological principles and concepts. 6.
- 7. Understand one's culture and its influences on individual and group behavior.
- Understand major psychological theories and their effects on 8. individual and group behavior.
- Understand mathematical and scientific principles and con-9. cepts.
- Use logical reasoning to solve mathematical and scientific 10. problems.
- 11. Understand, appreciate, and enjoy physical activity and its role in enhancing the quality of one's life.

### ASSOCIATE OF ARTS DEGREE

Students who select the Associate of Arts degree at Cleveland Community College transfer to senior colleges to pursue such majors as the following:

| Art                     | English           | Liberal Arts      |
|-------------------------|-------------------|-------------------|
| Accounting              | Foreign Languages | Literature        |
| Business Administration | History           | Political Science |
| Economics               | Journalism        | Psychology        |
| Education               | Law               | Religion          |
|                         |                   | Social Work       |

An Associate of Arts degree will be granted to students completing the following requirements:

### A. General Education Requirements

The satisfactory completion of no fewer than 96 quarter hours.

### **B.** Specific Graduation Requirements

- 1. Completion of 12 quarter hours of skills in communications as verified by the following sequence: ENG 130, 131, 132, SPH 204.
- 2. Completion of 12-15 quarter hours from at least two different disciplines of the following humanities and fine arts courses: (3 hour courses)
  - a. ART 101, 205
  - b. DRA 105
  - c. ENG 105, 201; select from 205, 207 or from 221, 222
  - d. MUS 101
  - e. PHI 101
  - f. REL 101
- 3. Completion of 9 quarter hours of mathematics as follows: MAT 121, 122, 123
- 4. Completion of 12 quarter hours of a laboratory science from the following sequences of courses:
  - a. BIO 101, 102, 103
  - b. CHM 101, 102, 103
  - c. PHY 201, 202, 203
- Completion of 12-15 guarter hours from at least two different 5. disciplines of the following social science courses: (3 hour courses)
  - a. HIS 101, 102, 103; HIS 110, 111, 112
  - b. PSY 101, 201, 202
  - c. SOC 101, 202, 203
- 6. Completion of 3 quarter hours of physical education, (usually activity courses), chosen from the following:

- a. Lecture Courses: SAF 106; PED 116 (3 hour courses)
- b. Activity Courses: PED 101, 102, 103, 104, 105, 107, 108, 110, 111, 112, 113, 114, 115 (1 hour courses)

Students with a medical disability may substitute lecture courses for activity courses.

### C. Elective Graduation Requirements

- Completion of electives from any of the following areas:
  - a. Humanities (ART 101, 102, 103, 202, 203, 205; DRA 105, 106, 107, 200, 202, 208; ENG 105, 133, 200, 203, 205, 207, 210; ENG 216 & 217 (1 hr courses); 218, 221, 222; MUS 101; PHI 101; REL 101, 102, 103; SPH 204) (3 hour courses)
  - b. Mathematics (MAT 117, 201, 202, 203, 210) (3 hour courses)
  - c. Science (BIO 101, 102, 103; BIO 107, 108, 109; BIO 205, 206; BOT 200, 201, 202; CHM 101, 102, 103; PHY 201, 202, 203) (4 hour classes)
  - d. Social Science (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 202, 208, 209, 210, 238, 240; SOC 101, 202, 203, 208) (3 hour courses)
  - e. Business Courses: ACC 120, 121, 222 (6 hour courses); ECO 102, 104 (5 hour courses); CAS 101 (4 hour course). approved elective
  - f. Education Courses (EDU 103, 121, 151, 201, 202) (3 hour courses)
  - g. Foreign Language Courses (SPA 160, 161, 162, 260, 261, 262) (4 hour courses)
  - h. Electives may include up to 6 quarter hours of co-op or work experience.
- Courses used to satisfy specific graduation requirements may not be used again for elective requirements.

#### A.A. Pre-Business

The Pre-Business curriculum is a college transfer program designed for students who plan to pursue a four-year degree in business. The program consists of liberal arts, science, and mathematics courses required during the first two-years of college together with college transfer courses in accounting, economics, and data processing.

Upon completion of the Pre-Business program, the student should be able to:

- 1. Write and speak with clarity and precision, in keeping with the rules of standard English.
- Read and interpret literature critically and analytically. 2.
- Write critically and analytically in response to literary themes and ideas.
- Understand the relationship between the history of western 4. civilization and one's culture.
- Understand the meaning of the "multicultural" approach to 5. history.
- 6. Understand sociological principles and concepts.
- 7. Understand one's culture and its influences on individual and group behavior.
- Understand major psychological theories and their effects on 8. individual and group behavior.
- Understand mathematical and scientific principles and 9. concepts.
- 10. Use logical reasoning to solve mathematical and scientific problems.
- 11. Understand, appreciate, and enjoy physical activity and its role in enhancing the quality of one's life.
- 12. Understand principles of accounting.
- 13. Determine the success or failure of business procedures.
- 14. Understand economic theories as applied to governments throughout history.
- 15. Understand macroeconomics and microeconomics in today's world environment and apply this understanding to governments and businesses.
- I. Communications (12 quarter hours) ENG 130, 131, 132; SPH 204
- II. Humanities and Fine Arts (12 quarter hours)

Humanities (6 quarter hours) Select two: ENG 105, 201, 205, 221, 222, DRA 105. Select one: PHI 101; REL 101 (3 hour courses)

Fine Arts (6 quarter hours) Select two: ART 101, ART 205, ENG 107; MUS 101 (3 hour courses)

- III. Mathematics (9 quarter hours) MAT 121, 122, 123
- IV. Science (12 guarter hours) Select BIO 101, 102, 103, or CHM 101, 102, 103 or PHY 201, 202, 203
- V. Social Science (12 quarter hours) Select one sequence of courses and one course from one of the other disciplines: HIS 101, 102, 103 (Recommended); HIS 110, 111, 112; PSY 101, 201, 240; SOC 101, 202, 203 (3 hour courses)
- VI. Physical Education (3 quarter hours) Select three courses from the following:

PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour courses). Activity courses recommended for college transfer.

Students with medical disability may take SAF 106 or PED 116 (3 hour courses)

VII.Electives (36 quarter hours) ACC 120, 121, 222; ECO 102, 104; COA 101; four-hours, social science electives.

### SUGGESTED SEQUENCE OF COURSES ASSOCIATE OF ARTS - PRE-BUSINESS-C004

|                |  | HOURS |     |        |
|----------------|--|-------|-----|--------|
|                |  | CLASS | LAB | CREDIT |
| FIRST YEAR     |  |       |     |        |
| Fall Quarter   |  |       |     |        |
| ENG 0130       | English Grammar & Composition          | 3     | 0   | 3      |
|                | Science Sequence (select one)          | 3     | 2   | 4      |
|                | BIO 0101; CHM 0101; PHY 0201           |       |     |        |
|                | Social Science Sequence (select one)   | 3     | 0   | 3      |
|                | HIS 0101; PSY 0101; SOC 0101           |       |     |        |
|                | Fine Arts Selection (select one)       | 3     | 0   | 3      |
|                | ART 0101, ART 0205; DRA 0107; MUS 0101 |       |     |        |
|                | Physical Education                     | 0     | 2   | _1     |
|                |  | 12    | 4   | 14     |
| Winter Quarter |  |       |     |        |
| ENG 0131       | Composition & Intro to Literature      | 3     | 0   | 3      |
|                | Science Sequence Continued             | 3     | 2   | 4      |
|                | Bio 0102; CHM 0102; PHY 0202           |       |     |        |
|                | Social Science Sequence Continued      | 3     | 0   | 3      |
|                | HIS 0102; PSY 0201; SOC 0202           | _     | -   | _      |
|                | Humanities Selection (select one)      | 3     | 0   | 3      |
|                | ENG 0105, ENG 0201; DRA 0105           | •     | _   |        |
|                | Physical Education                     | 0     | 2   | 1      |
|                |  |       |     | 4.4    |
|                |  | 12    | 4   | 14     |

| Carlas (        | O autau      |  | CLASS  | HOUR:          | S<br>CREDIT |
|-----------------|--------------|--|--------|----------------|-------------|
| Spring (<br>ENG | 0132         | Composition/Research/Documentation Science Sequence Continued                                    | 3<br>3 | 0 2            | 3<br>4      |
|                 |              | BIO 0103; CHM 0103; PHY 0203<br>Social Science Sequence Continued<br>HIS 0103; PSY 0240; SOC 203 | 3      | 0              | 3           |
|                 |              | Social Science Elective  | 3      | 0              | 3           |
|                 |              | Social Science Elective  | 3      | 0              | 3           |
|                 |              | Physical Education   | _0     | _2             | _1          |
|                 |              |  | 15     | 4              | 17          |
| SECON           |              |  |        |                |             |
| Fall Qua        |              |  |        |                |             |
| MAT             | 0121         | College Algebra I  | 3      | 0              | 3           |
| SPH             | 0204<br>0120 | Fundamentals of Speech   | 3<br>4 | 0<br>4         | 3<br>6      |
| ACC<br>ECO      | 0120         | Accounting I<br>Economics I  | 5      | 0              | 5           |
|                 | 0102         | Economics 1  |        |                |             |
| 14/1            |              |  | 15     | 4              | 17          |
| Winter (        |              |  |        |                | _           |
| MAT             | 0122         | College Algebra II   | 3      | 0              | 3           |
| ACC             | 0121         | Literature Selection Accounting II   | 3<br>4 | 0<br>4         | 3<br>6      |
| ECO             | 104          | Economics II   | 5      | 0              | 5           |
| LCO             | 104          | Economics II   |        |                |             |
| Curina (        |              |  | 15     | 4              | 17          |
| Spring (        |              | Tilananamata   |        | _              | _           |
| MAT             | 0123         | Trigonometry Literature Selection  | 3<br>3 | 0              | 3<br>3      |
| ACC             | 0222         | Accounting III   | 4      | 4              | ა<br>6      |
| CAS             | 0101         | Intro to Computer Technology   | 4      | 0              | 4           |
| 0,10            | 3101         | Elective   | 1      | 0              | 1           |
|                 |              |  | 15     | _ <del>_</del> |             |
|                 |              |  | 13     | U              | 17          |

Total credit hours required for graduation = 96

### A.A. Pre-Education: Early Childhood/Elementary

- I. Communications (12 quarter hours) ENG 130, 131, 132; SPH 204
- II. Humanities and Fine Arts (18 quarter hours)

Fine Arts (6 quarter hours) Select two: ART 101; DRA 107; MUS 101 (3 hour courses)

Humanities (12 quarter hours) ENG 105, 201 (3 hour courses) Select 3 hours from Group I: ENG 205, 207 (3 hour courses)

Select 3 hours from Group II: ENG 221, 222 (3 hour courses) and

Select: REL 101 or PHI 101 (3 hour courses)

- III. Mathematics (9 quarter hours) MAT 121, 122, 123
- IV. Science (12 quarter hours) Select BIO 101, 102, 103 or CHM 101, 102, 103 or PHY 201, 202, 203
- V. Social Science (15 quarter hours)

(9 quarter hours) HIS 101, 102, 103 or HIS 110, 111, 112

(3 quarter hours) PSY 101 (Required)

(3 quarter hours) Select one: PSY 201, 202, 208, 209, 210; SOC 101, 202, 203 (3 hour courses)

### VI. Physical Education (3 quarter hours)

Select three courses from the following: PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour courses) (Activity courses recommended for college transfer)

Students with a medical disability may take SAF 106 or PED 116 (3 hour courses)

#### VII. Electives

- 1. Completion of electives from any of the following areas:
  - Humanities (ART 101, 102, 103, 202, 203, 205; DRA 105, 106, 107, 200, 202, 208; EDU 151; ENG 105, 133, 200, 203, 205, 207, 210; ENG 216, 217) (1 hr. courses); 218, 221, 222; MUS 101; PHI 101; REL 101, 102, 103; SPH 204 (3 hr. courses)
  - b. Mathematics (MAT 117, 201, 202, 203, 210) (3, 4, and 5 hr. courses)
  - c. Science (BIO 101, 102, 103; CHM 101, 102, 103; PHY 201, 202, 203) (4 hr. courses)

- d. Social Sciences (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 202, 208, 209, 210, 238, 240; SOC 101, 202, 203, 208) (3 hr. courses)
- e. Education Courses (EDU 103, 121, 151, 201, 202) (3 hr. courses)
- Foreign Language (SPA 160, 161, 162, 260, 261, 262) (4 hr. courses)
- g. Electives may include up to 6 quarter hours of co-op work experience.
- Courses used to satisfy specific graduation requirements may 2. not be used again for elective requirements.

### SUGGESTED SEQUENCE OF COURSES **ASSOCIATE OF ARTS - PRE-EDUCATION:** EARLY CHILDHOOD/ELEMENTARY -C020

|          |         |                                    | HOURS |     | S      |
|----------|---------|------------------------------------|-------|-----|--------|
|          |         |                                    | CLASS | LAB | CREDIT |
| Fall Qua | arter   |                                    |       |     |        |
| ENG      | 0130    | English Grammar & Composition      | 3     | 0   | 3      |
|          |         | Science Sequence (select one)      | 3     | 2   | 4      |
|          |         | BIO 0101; CHM 0101; PHY 0201       |       |     |        |
|          |         | History Sequence (select one)      | 3     | 0   | 3      |
|          |         | HIS 0101 or 0110                   |       |     |        |
|          |         | Fine Arts Selection (select one)   | 3     | 0   | 3      |
|          |         | ART 0101; MUS 0101                 |       |     |        |
|          |         | Physical Education                 | 0     | 2   | 1      |
|          |         | Elective                           | 3     | 0   | _3     |
|          |         |                                    | 15    | 4   | 17     |
| Winter 0 | Juarter |                                    |       | •   | ••     |
| ENG      | 0131    | Composition & Intro to Literature  | 3     | 0   | 3      |
|          | 0.0.    | Science Sequence Continued         | 3     | 2   | 4      |
|          |         | BIO 0102; CHM 0102; PHY 0202       |       | _   | ·      |
|          |         | History Sequence Continued         | 3     | 0   | 3      |
|          |         | HIS 0102 or 0111                   |       |     |        |
|          |         | Fine Arts Selection (select one)   | 3     | 0   | 3      |
|          |         | ART 0101; MUS 0101                 |       |     |        |
|          |         | Humanities Selection               | 3     | 0   | 3      |
|          |         | REL 0101 or PHI 101                |       |     |        |
|          |         | Physical Education                 | _0    | 2   | 1      |
|          |         |                                    | 15    | 4   | 17     |
| Spring ( | Juarter |                                    | 13    | 7   | 1,     |
| ENG      | 0132    | Composition/Research/Documentation | 3     | 0   | 3      |
| LITO     | 0102    | Science Sequence Continued         | 3     | 2   | 4      |
|          |         | BIO 0103; CHM 0103; PHY 0203       | Ŭ     | _   | •      |
|          |         | History Sequence continued         | 3     | 0   | 3      |
|          |         | HIS 0103 or 0112                   | ŭ     | Ŭ   | Ŭ      |
|          |         | Physical Education                 | 0     | 2   | 1      |
|          |         | Elective                           | 3     | 0   | 3      |
|          |         | Elective                           | 3     | 0   | 3      |
|          |         |                                    |       |     |        |
|          |         |                                    | 15    | 4   | 17     |

|                  |                  |                                |    | HOUR! | S<br>CREDIT |
|------------------|------------------|--------------------------------|----|-------|-------------|
| SECON<br>Fall Qu | ID YEAR<br>arter |                                |    |       |             |
| MAT              | 0121             | College Algebra I              | 3  | 0     | 3           |
| SPH              | 0204             | Fundamentals of Speech         | 3  | 0     | 3           |
|                  |                  | Literature Selection           | 3  | 0     | 3           |
| PSY              | 0101             | Intro to Psychology            | 3  | 0     | 3           |
|                  |                  | Elective                       | _3 | 0     | _3          |
|                  |                  |                                | 15 | 0     | 15          |
| Winter           | Quarter          |                                |    |       |             |
| MAT              | 0122             | College Algebra II             | 3  | 0     | 3           |
|                  |                  | Literature Selection           | 3  | 0     | 3           |
|                  |                  | Psychology/Sociology Selection | 3  | 0     | 3           |
|                  |                  | Elective                       | 3  | 0     | 3           |
|                  |                  | Elective                       | _3 | 0     | _3          |
|                  |                  |                                | 15 | 0     | 15          |
| Spring           | Quarter          |                                |    |       |             |
| MAT              | 0123             | Trigonometry                   | 3  | 0     | 3           |
|                  |                  | Literature Selection           | 3  | 0     | 3           |
|                  |                  | Elective                       | 3  | 0     | 3           |
|                  |                  | Elective                       | 3  | 0     | 3           |
|                  |                  | Elective                       | _3 | 0     | _3          |
|                  |                  |                                | 15 | 0     | 15          |

Total credit hours required for graduation = 96

### A.A. Pre-Education: Intermediate/Secondary

- I. Communications (12 quarter hours) ENG 130, 131, 132; SPH 204
- II. Humanities and Fine Arts (18 quarter hours)

Fine Arts (6 quarter hours) Select two: ART 101, DRA 107, MUS 101 (3 hour courses)

**Humanities** (12 quarter hours) ENG 105, 201 (3 hour courses) Select 3 hours from Group I: ENG 205, 207 (3 hour courses)

Select 3 hours from Group II: ENG 221, 222 (3 hour courses) and

Select: REL 101 or PHI 101 (3 hour courses)

- III. Mathematics (9 quarter hours) MAT 121, 122, 123
- IV. Science (12 quarter hours) Select BIO 101, 102, 103 or CHM 101, 102, 103 or PHY 201, 202, 203
- V. Social Science (15 quarter hours)

(9 quarter hours) HIS 101, 102, 103 or 110, 111, 112 (3 hour

courses)

(3 hour courses) PSY 101 (required)

(3 hour courses) Select one: PSY 103, 201, 202, 208, 210

SOC 101, 202, 203 (3 hour courses)

VI. Physical Education (3 quarter hours)

Select three courses from the following: PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour courses)

Students with a medical disability may take SAF 106 or PED 116 (3 hour courses) instead of activity class.

#### VII. Electives

- a. Humanities (ART 101, 102, 103, 202, 203, 205; DRA 105, 106, 107, 200, 202, 208; EDU 151; ENG 105, 133, 200, 203, 205, 207, 210; ENG 216, 217 (1 hr. courses); 218, 221, 222; MUS 101; PHI 101; REL 101, 102, 103; SPH 204) (3 hr. courses)
  - b. Mathematics (MAT 117, 201, 202, 203, 210) (3, 4, and 5 hr. courses)
  - c. Science (BIO 101, 102, 103; CHM 101, 102, 103; PHY 201, 202, 203) (4 hr. courses)

- d. Social Sciences (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 202, 208, 209, 210, 238, 240; SOC 101, 202, 203, 208) (3 hr. courses)
- e. Education Courses (EDU 103, 121, 151, 201, 202) (3 hr. courses)
- Foreign Language Courses (SPA 160, 161, 162, 260, 261, 262) (3 hr. courses)
- g. Electives may include up to 6 quarter hours of co-op or work experience.
- h. Courses used to satisfy specific graduation requirements may not be used again for elective requirements.
- Students in Pre-Education should select elective courses in keeping with the program requirements of the college or university to which they plan to transfer.

### SUGGESTED SEQUENCE OF COURSES ASSOCIATE OF ARTS - PRE-EDUCATION: INTERMEDIATE/ SECONDARY - C028

|                |   | HOURS |     |        |
|----------------|---|-------|-----|--------|
|                |   | CLASS | LAB | CREDIT |
| Fall Quarter   |   |       |     |        |
| ENG 0130       | English Grammar & Composition                                 | 3     | 0   | 3      |
|                | Science Sequence (select one)<br>BIO 0101; CHM 0101; PHY 0201 | 3     | 2   | 4      |
|                | History Sequence (select one) HIS 0101 or 0110                | 3     | 0   | 3      |
|                | Fine Arts Selection (select one) ART 0101; DRA 0107; MUS 0101 | 3     | 0   | 3      |
|                | Physical Education  | 0     | 2   | 1      |
|                | Elective  | 3     | 0   | _3     |
|                |   | 15    | 4   | 17     |
|                | (ART 0101 & MUS 0101 recommended education majors)            | for   |     |        |
| Winter Quarter | ,   |       |     |        |
| ENG 0131       | Composition & Intro to Literature                             | 3     | 0   | 3      |
|                | Science Sequence Cont.<br>BIO 0102; CHM 0102; PHY 0202        | 3     | 2   | 4      |
|                | History Sequence Cont.<br>HIS 0102 or 0111                    | 3     | 0   | 3      |
|                | Fine Arts Selection (select one) ART 0101; DRA 0107; MUS 0101 | 3     | 0   | 3      |
|                | Humanities Selection REL 0101 or 0103                         | 3     | 0   | 3      |
|                | Physical Education  | _ 0   | 2   | _1     |
|                |   | 15    | 4   | 17     |

|         |         |                                    | CLASS | HOUR | S<br>CREDIT |
|---------|---------|------------------------------------|-------|------|-------------|
| Spring  | Quarter |                                    | CLASS | LAD  | CHEDIT      |
| ENG     | 0132    | Composition/Research/Documentation | 3     | 0    | 3           |
| LING    | 0132    | Science Sequence Continued         | 3     | 2    | 4           |
|         |         | BIO 0103; CHM 0103; PHY 0203       | 3     | _    | 7           |
|         |         | History Sequence Continued         | 3     | 0    | 3           |
|         |         | HIS 0103 or 0112                   | 3     | U    | 3           |
|         |         | Physical Education                 | 0     | 2    | 1           |
|         |         | Elective                           | 3     | 0    | 3           |
|         |         | Elective                           | 3     | 0    | _3          |
|         |         | Elective                           |       |      |             |
|         |         |                                    | 15    | 4    | 17          |
|         |         |                                    |       |      |             |
|         | D YEAR  |                                    |       |      |             |
| Fall Qu | arter   |                                    |       |      |             |
| MAT     | 0121    | College Algebra I                  | 3     | 0    | 3           |
| SPH     | 0204    | Fundamentals of Speech             | 3     | 0    | 3           |
|         |         | Literature Selection               | 3     | 0    | 3           |
| PSY     | 0101    | Intro to Psychology                | 3     | 0    | 3           |
|         |         | Elective                           | _3    | 0    | _3          |
|         |         |                                    | 15    | 0    | 15          |
| Winter  | Quarter |                                    | 13    | O    | .5          |
| MAT     | 0122    | College Algebra II                 | 3     | 0    | 3           |
| IVIZ    | 0122    | Literature Selection               | 3     | 0    | 3           |
|         |         | Psychology/Sociology Selection     | 3     | 0    | 3           |
|         |         | Elective                           | 3     | 0    | 3           |
|         |         | Elective                           | 3     | 0    | 3           |
|         |         | Licotive                           |       | _    |             |
|         |         |                                    | 15    | 0    | 15          |
|         | Quarter |                                    |       |      |             |
| MAT     | 0123    | Trigonometry                       | 3     | 0    | 3           |
|         |         | Literature Selection               | 3     | 0    | 3           |
|         |         | Elective                           | 3     | 0    | 3           |
|         |         | Elective                           | 3     | 0    | 3           |
|         |         | Elective                           | _3 _  | 0    | _3          |
|         |         |                                    | 15    | 0    | 15          |

Total credit hours required for graduation = 96

### A.A. Pre-Liberal Arts

- I. Communications (12 quarter hours) ENG 130, 131, 132; SPH 204
- II. Humanities and Fine Arts (18 quarter hours)

Literature (9 quarter hours) ENG 105, 201; Select one: ENG 221, 222, ENG 205, 207 (3 hour courses)

Fine Arts (6 quarter hours) Select two: ART 101, ART 205; DRA 107, MUS 101 (3 hour courses)

**Humanities** (3 quarter hours) Select PHI 101 or REL 101 (3 hour courses)

- III. Mathematics (9 quarter hours) MAT 121, 122, 123
- IV. Science (12 quarter hours) Select BIO 101, 102, 103 or CHM 101, 102, 103 or PHY 201, 202, 203
- V. Social Science (15 quarter hours)

Select one sequence, HIS 101, 102, 103 or HIS 110, 111, 112 (9 quarter hours)

Select two courses (6 quarter hours) from PSY 101, 201, 202, 240; SOC 101, 202, 203 (3 hour courses)

### VI. Physical Education (3 quarter hours)

Select three courses from the following: PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour courses) (Activity courses recommended for college transfer)

Students with a medical disability may take SAF 106 or PED 116 (3 hour courses) instead of activity classes.

### VII. Electives

- Completion of electives to be selected from any of the following areas:
  - a. Humanities (ART 101, 102, 103, 202, 203, 205; DRA 105, 106, 200, 107, 202, 208; ENG 105; ENG 133, 200, 203, 205, 221, 222, 207, 210, 216, 217, 218; MUS 101; PHI 101; REL 101, 102, 103); SPA 160, 161, 162, 261, 262, 263
  - b. Mathematics (MAT 117, 201, 202, 203, 210) (3 hour courses)
  - c. Science (BIO 101, 102, 103; CHM 101, 102, 103; PHY 201, 202, 203) (4 hour courses)
  - d. Social Science (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 202, 208, 209, 210, 238, 240; SOC 101, 202, 203, 208) (3 hour courses)

- e. Foreign Language (SPA 160, 161, 162, 260, 261, 262)
- f. Electives may include up to 6 quarter hours of co-op or work experience.
- Courses selected will depend upon the student's major area of interest. At least two disciplines must be included. Students must have advisor approval in designing the electives block.
- 3. Courses used to satisfy specific graduation requirements may not be used again for elective requirements.

# SUGGESTED SEQUENCE OF COURSES ASSOCIATE OF ARTS - PRE-LIBERAL ARTS - C011

|         |         |  |       | HOUR | S      |
|---------|---------|--|-------|------|--------|
|         |         |  | CLASS | LAB  | CREDI1 |
| FIRST ' |         |  |       |      |        |
| Fall Qu | arter   |  |       |      |        |
| ENG     | 0130    | English Grammar & Composition          | 3     | 0    | 3      |
|         |         | Science Sequence (select one)          | 3     | 2    | 4      |
|         |         | BIO 0101; CHM 0101; PHY 0201           |       |      |        |
|         |         | History Sequence (select one)          | 3     | 0    | 3      |
|         |         | HIS 0101 or 0110                       |       |      | _      |
|         |         | Fine Arts Selection (select one)       | 3     | 0    | 3      |
|         |         | ART 0101, ART 0205; DRA 0107; MUS 0101 |       | Ü    | J      |
|         |         | Physical Education                     | 0     | 2    | 1      |
|         |         | Elective                               |       |      |        |
|         |         | Elective                               | _3 .  | 0    | _3     |
|         |         |  | 15    | 4    | 17     |
| Winter  | Quarter |  |       |      |        |
| ENG     | 0131    | Composition & Intro to Literature      | 3     | 0    | 3      |
|         |         | Science Sequence Continued             | 3     | 2    | 4      |
|         |         | BIO 0102; CHM 0102; PHY 0202           |       |      |        |
|         |         | History Sequence Continued             | 3     | 0    | 3      |
|         |         | HIS 0102 or 0111                       | · ·   | Ŭ    | Ū      |
|         |         | Fine Arts Selection (select one)       | 3     | 0    | 3      |
|         |         | ART 0101, 0205; DRA 0107; MUS 0101     | 3     | ٠    | 3      |
|         |         | Physical Education                     | 0     | 0    | 4      |
|         |         | Physical Education                     | _0 .  | _2   | _1     |
|         |         |  | 12    | 4    | 14     |
| Spring  | Quarter |  |       |      |        |
| ENG     | 0132    | Composition/Research/Documentation     | 3     | 0    | 3      |
|         |         | Science Sequence Continued             | 3     | 2    | 4      |
|         |         | BIO 0103; CHM 0103; PHY 0203           |       |      |        |
|         |         | History Sequence Continued             | 3     | 0    | 3      |
|         |         | HIS 0103 or 0112                       |       | Ŭ    |        |
|         |         | Social Science Selection               | 3     | 0    | 3      |
|         |         | Physical Education                     | Ö     | 2    | 1      |
|         |         | Elective                               | 3     | 0    | 3      |
|         |         | Liouito                                |       |      |        |
|         |         |  | 15    | 4    | 17     |
|         |         |  |       |      |        |

|          |         |                        |       | HOURS | 3      |
|----------|---------|------------------------|-------|-------|--------|
|          |         |                        | CLASS | LAB   | CREDIT |
| SECON    | D YEAR  |                        |       |       |        |
| Fall Qua | arter   |                        |       |       |        |
| MAT      | 0121    | College Algebra I      | 3     | 0     | 3      |
| SPH      | 0204    | Fundamentals of Speech | 3     | 0     | 3      |
|          |         | Literature Selection   | 3     | 0     | 3      |
|          |         | Elective               | 3     | 0     | 3      |
|          |         | Elective               | _3    | 0     | _3     |
|          |         |                        | 15    | 0     | 15     |
| Winter   | Quarter |                        |       |       |        |
| MAT      | 0122    | College Algebra II     | 3     | 0     | 3      |
|          |         | Literature Selection   | 3     | 0     | 3      |
|          |         | Humanities             | 3     | 0     | 3      |
|          |         | REL 0101 or 0103       |       |       |        |
|          |         | Elective               | 3     | 0     | 3      |
|          |         | Elective               | 3     | 0     | 3      |
|          |         | Elective               | _3    | 0     | _3     |
|          |         |                        | 18    | 0     | 18     |
| Spring   | Quarter |                        |       |       |        |
| MAT      | 0123    | Trigonometry           | 3     | 0     | 3      |
|          |         | Literature Selection   | 3     | 0     | 3      |
|          |         | Elective               | 3     | 0     | 3      |
|          |         | Elective               | 3     | 0     | 3      |
|          |         | Elective               | _3    | 0     | _3     |
|          |         |                        | 15    | 0     | 15     |

Total credit hours required for graduation = 96

### ASSOCIATE OF SCIENCE DEGREE

Students who select the Associate of Science degree at Cleveland Community College transfer to senior colleges to pursue such majors as the following:

Accounting Economics Optometry **Physics** Agriculture Education Engineering Pharmacy Biology Business Administration Law Political Sciences Chemistry Mathematics Social Work Computer Science Medicine Textiles Veterinary Dentistry Nursing Medicine

An Associate of Science degree will be granted to the students completing the following requirements:

### A. General Education Requirements

1. The completion of no fewer than 96 quarter hours. The completion of 26 hours in electives. The completion of 70 hours in required courses.

### **B.** Specific Graduation Requirements

- 1. Completion of 12 quarter hours of skills in communications as verified by the following sequence: ENG 130, 131, 132; SPH 204
- 2. The completion of 6 quarter hours from the following humanities and fine arts courses:
  - a. ART 101 (3 hour course)
  - b. DRA 107 (3 hour course)
  - c. ENG 105, 201, 205, 207, 221, 222 (3 hour courses)
  - d. PHI 101 (3 hour course)
  - e. REL 101 (3 hour course)
- 3. Completion of 19 quarter hours of mathematics: MAT 121, 122, 123, 201, 202
- Completion of 24 quarter hours of sciences from two of the following sequences of courses:
  - a. BIO 101, 102, 103
  - b. CHM 101, 102, 103
  - c. PHY 201, 202, 203
- Completion of 9 quarter hours of social science from the following:
  - a. HIS 101, 102, 103 (3 hour courses)
  - b. PSY 101, 103, 201, 208, 210 (3 hour courses)
  - c. SOC 101, 202, 203 (3 hour courses)

- 6. Completion of 3 quarter hours of physical education, (usually activity courses), chosen from the following:
  - a. Lecture courses: SAF 106; PED 116 (3 hour courses)
  - b. Activity courses: PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour courses)\*

Students with a medical disability may substitute lecture courses for activity courses. (SAF 106 or PED 116)

### C. Elective Graduation Courses

- Completion of electives to be selected from any of the following 1. areas:
  - a. Humanities (ART 101, 103, 205; DRA 105, and 107, 200; ENG 105, 133, 200, 201, 205, 207, 221, 222, 216, 217, MUS 101; PHI 101; REL 101; SPA 160, 161, 162, 260, 261, 262)
  - b. Mathematics (MAT 117, 203) (3 hour courses)
  - c. Science (BIO 101, 102, 103, 107, 108, 205; CHM 101, 102, 103; PHY 201, 202, 203; ZOO 201; BOT 202) (4 hour classes)
  - d. Social Science (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 208, 210; SOC 101, 202, 203) (3 hour courses)
  - e. Business Courses (CAS 101) (4 hour course)
  - f. Education Courses (EDU 103, 121, 151, 202, 201) (3 hours)
  - g. Electives may include up to 6 quarter hours of co-op or work experience
- 6. Courses used to satisfy graduation requirements may not be used again for elective requirements.

<sup>\*</sup>Activity courses are recommended for college transfer.

72 / Degree Credit Programs

II ORAI Communication (5 hrs) Squarel
A.S. Pre-Science

I. Communications (12 quarter hours) ENG 130, 131, 132, SPH 204

# II. Humanities and Fine Arts (6 quarter hours)

Humanities (3 quarter hours) Select one: ENG 105, 201, 205, 207, 221, 222; PHI 101; REL 101 (3 hour courses) Fine Arts (3 quarter hours) Select one: ART 101; DRA 107 (3 hour courses)

## III. Mathematics (19 quarter hours) MAT 121, 122, 123, 201, 202

### IV. Science (24 quarter hours)

Select two of the following sequences: BIO 101, 102, 103 (4 hour courses) CHM 101, 102, 103 (4 hour courses) PHY 201, 202, 203 (4 hour courses)

### at lemp V. Social Science (9 quarter hours)

Select one of the following sequences: HIS 101, 102, 103 (3 hour courses) PSY 101, 208 and either PSY 103 or 210 (3 hour courses) SOC 101, 202, 203 (3 hour courses)

# VI. Physical Education (3 quarter hours)

Select three courses from the following: PED 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115 (1 hour course) Activity courses are recommended for college transfer.

Students with a medical disability may take SAF 106 or PED 116 (3 hour courses) instead of activity classes.

### VII. Electives

- Elective credit must include CAS 101 and 19 additional hours selected from any of the following areas:
  - a. Humanities (ART 101, 103, 205; DRA 105, 107, 200; ENG 105, 107, 133, 200, 201, 205, 221, 222, 216, 217, MUS 101; PHI 101; REL 101; SPA 160, 161, 162, 260, 261, 262)
  - b. Mathematics (MAT 117, 203) (3 hour courses)
  - c. Science (BIO 101, 102, 103, 107, 108, 205; CHM 101, 102, 103; PHY 201, 202, 203; ZOO 201; BOT 202) (4 hour courses)
  - d. Social Science (HIS 101, 102, 103, 110, 111, 112; PSY 101, 103, 201, 208, 210; SOC 101, 202, 203; CHM 101, 102, 103; PHY 201, 202, 203) (3 hour courses)

- e. Education Courses (EDU 201) (3 hour course)
- f. Electives may include up to 6 quarter hours of co-op or work experience
- 2. Courses selected will depend upon the student's major area of interest. At least two disciplines must be included. Students must have advisor approval in designing the electives block.
- 3. Courses used to satisfy graduation requirements may not be used again for elective requirements.

### SUGGESTED SEQUENCE OF COURSES **ASSOCIATE OF SCIENCE - PRE-SCIENCE - C018**

|          |         |                                       |       | HOUR | S                |
|----------|---------|---------------------------------------|-------|------|------------------|
|          |         |                                       | CLASS | LAB  | CREDIT           |
| FIRST Y  | 'EAR    |                                       |       |      |                  |
| Fall Qua | arter   |                                       |       |      |                  |
| ENG      | 0130    | English Grammar & Composition         | 3     | 0    | 3                |
| MAT      | 0121    | College Algebra I                     | 3     | 0    | 3                |
| 141/ 11  | 0121    | Science Sequence (select one)         | 3     | 2    | 4                |
|          |         | · · · · · · · · · · · · · · · · · · · | 3     | ~    | 4                |
|          |         | BIO 0101; CHM 0101; PHY 0201          | C 0   |      |                  |
|          |         | Social Science Sequence               | 5-3-  | 0    | 3 >              |
|          |         | HIS 0101; PSY 0101; or SOC 0101       |       |      |                  |
|          |         | Physical Education                    | 0     | 2_   | in manual paints |
|          |         | Elective                              | 3     | 0-   | material Barrens |
|          |         |                                       | 15    | 4    | 17               |
| Winter ( | Juarter |                                       | 10    | -    | ' '              |
| ENG      | 0131    | Composition & Intro to Literature     | 3     | 0    | 3                |
| MAT      | 0122    | College Algebra II                    | 3     | 0    | 3                |
| IVIA     | 0122    |                                       | _     |      |                  |
|          |         | Science Sequence Continued            | 3     | 2    | 4                |
|          |         | BIO 0102; CHM 0102; PHY 0202          | _     |      |                  |
|          |         | Social Science Sequence Continued     | 3     | 0    | 3                |
|          |         | HIS 0102; PSY 0208; or SOC 0202       |       |      |                  |
|          |         | Physical Education                    | 0     | 2    | 1                |
|          |         | Elective                              | _3    | 0    | _3               |
|          |         |                                       | 15    | 4    | 17               |
| Spring ( | Juarter |                                       | 13    | 7    | ''               |
| ENG      | 0132    | Composition/Research/Documentation    | 3     | 0    | 2                |
| MAT      | 0132    |                                       |       | _    | 3                |
| IVIAI    | 0123    | Trigonometry                          | 3     | 0    | 3                |
|          |         | Science Sequence Continued            | 3     | 2    | 4                |
|          |         | BIO 0103; CHM 0103; PHY 0203          |       |      |                  |
|          |         | Social Science Sequence Continued     | 3     | 0    | 3                |
|          |         | HIS 0103; PSY 0103; or SOC 0203       |       |      |                  |
|          |         | Physical Education                    | _0    | 2    | _1               |
|          |         |                                       | 12    | 4    | 14               |
| SECON    | D VEAR  |                                       | 12    | 7    | 1-7              |
| Fall Qua |         |                                       |       |      |                  |
| MAT      | 0201    | Differential Calculus                 | _     | 0    | -                |
| WIZT     | 0201    |                                       | 5     | 0    | 5                |
|          |         | Second Science Sequence               | 3     | 2    | 4                |
|          |         | BIO 0101; CHM 0101; PHY 0201          |       |      |                  |
|          |         | Humanities (select one)               | 3     | 0    | 3                |
| 040      |         | ENG 0105, 0201; PHI 0101; REL 0101    |       |      |                  |
| CAS      | 0101    | Intro to Computer Technology          | _4    | 0    | _4               |
|          |         |                                       | 15    | 2    | 16               |
|          |         |                                       |       |      |                  |

|                |   | HOURS |     |        |
|----------------|---|-------|-----|--------|
|                |   | CLASS | LAB | CREDIT |
| Winter Quarter |   |       |     |        |
| MAT 0202       | Calculus & Analytic Geometry                                      | 5     | 0   | 5      |
|                | Second Science Sequence Continued<br>BIO 0102; CHM 0102; PHY 0202 | 3     | 2   | 4      |
|                | Fine Arts (select one) ART 0101 or ENG 0107                       | 3     | 0   | 3      |
|                | Electives   | 4     | 0   | 4      |
|                |   | 15    | 2   | 16     |
| Spring Quarter |   |       |     |        |
|                | Second Science Sequence Continued<br>BIO 0102; CHM 0103; PHY 0204 | 3     | 2   | 4      |
| SPH 0204       | Fundamentals of Speech  | 3     | 0   | 3      |
|                | Elective  | 3     | 0   | 3      |
|                | Elective  | 3     | 0   | 3      |
|                | Elective  | 3     | 0   | 3      |
|                | Elective  | _1 .  | 0   | _1     |
|                |   | 16    | 2   | 17     |

Total credit hours required for graduation = 96



# ASSOCIATE IN GENERAL **EDUCATION DEGREE (G020)**

### THE CURRICULUM

The required courses in the curriculum are selected to provide the basic general education requirements of liberal arts programs and to meet basic needs for successful progress toward program objectives. Electives should be chosen in accordance with student interests and ultimate objectives. Students may wish to place heavy emphasis on courses in business, technical, or social areas, depending on their educational or occupational plans.

The General Education program is designed for the student who is basically interested in two years of education beyond high school. This program provides a basic core of course work in the following areas:

| English and Literature     | . 15 | Quarter Hours |
|----------------------------|------|---------------|
| Fine Arts                  | 9    | Quarter Hours |
| Social Science and History | . 24 | Quarter Hours |
| Science and Mathematics    | . 21 | Quarter Hours |

This introduction into the broad fields of knowledge permits the student to explore self and clarify life goals. With this background one is able to intelligently choose additional course work in terms of interests and social needs.

When the student has completed basic general education requirements and accumulated electives to a total of 96 quarter hours, an Associate in General Education Degree will be granted.

Although the General Education curriculum is broader in scope than college transfer programs, General Education graduates should demonstrate the same general knowledge in the humanities (spoken and written communication, literature, etc.), social sciences (psychology, sociology, and history), mathematics, and natural sciences that their counterparts in college transfer programs must demonstrate. However, General Education students may select from a wide range of liberal arts and professional courses to meet special needs and interests.

Upon successful completion of the program, General Education students should:

- Demonstrate a broad understanding of social and psycholog-1. ical principles and concepts and their influences on group and individual behavior.
- Demonstrate a comprehensive overview of fine arts and liter-2. ature and their contribution to humanity.
- Understand broad religious and cultural ideas shaping human 3. thought.
- Understand mathematic and scientific principles and concepts 4. and their application.

# REQUIRED COURSES FOR GRADUATION (96 Quarter Hours)

| English : | and Litera  | ture (15 Quester House)                     |        |       |        |
|-----------|-------------|---|--------|-------|--------|
| English   | and Litera  | ture (15 Quarter Hours)                     |        | HOURS | 3      |
|           |             | TITLE                                       | CLASS  | LAB   | CREDIT |
| ENG       | 130         | English Grammar and Composition             | 3      | 0     | 3      |
| ENG       | 131         | Composition, and Introduction to Literature | 3      | 0     | 3      |
| ENG       | 132         | Composition, Research, and Documentation    | 3      | 0     | 3      |
| SPH       | 204         | Fundamentals of Speech                      | 3      | 0     | 3      |
| Select or | e of the fo |   |        |       |        |
| ENG       | 105         | Masterpieces of World Literature            | 3      | 0     | 3      |
| ENG       | 201         | English Literature Survey                   | 3      | Ō     | 3      |
| ENG       | 205         | Major American Writers                      | 3      | 0     | 3      |
| ENG       | 207         | Southern American Writers                   | 3      | 0     | 3      |
| ENG       | 221         | American Literature Survey I                | 3      | Ō     | 3      |
| ENG       | 222         | American Literature Survey II               | 3      | ō     | 3      |
|           |             | er Hours)                                   |        |       |        |
|           | •           | · ·   |        |       |        |
|           | ree of the  | _   |        | _     |        |
| ART       | 101         | Art Appreciation                            | 3      | 0     | 3      |
| ART       | 205         | Film Appreciation                           | 3      | 0     | 3      |
| DRA       | 107         | Theatre Appreciation                        | 3      | 0     | 3      |
| MUS       | 101         | Music Appreciation                          | 3      | 0     | 3      |
| Social S  | cience/His  | story/Humanities (24 Quarter Hours)         |        |       |        |
| HUM       | 101         | Dimensions of Human Experience              | 3      | 0     | 3      |
| PHI       | 101         | Introduction to Philosophy                  | 3      | 0     | 3      |
| PSY       | 101         | Introduction to Psychology                  | 3      | 0     | 3      |
| REL       | 101         | Major World Religions                       | 3      | 0     | 3      |
| SOC       | 101         | Introduction to Sociology                   | 3      | 0     | 3      |
| Select or | e three co  | ourse sequence:                             |        |       |        |
| HIS       | 101         | World Civilization I                        | 3      | 0     | 3      |
| HIS       | 102         | World Civilization II                       | 3      | 0     | 3      |
| HIS       | 103         | World Civilization III                      | 3      | 0     | 3      |
|           |             | or  |        |       |        |
| HIS       | 110         | American History I                          | 3      | 0     | 3      |
| HIS       | 111         | American History II                         | 3      | 0     | 3      |
| HIS       | 112         | American History III                        | 3      | 0     | 3      |
| Science   | and Math    | ematics (21 Quarter Hours)                  |        |       |        |
| MAT       | 121         | College Algebra I                           | 3      | 0     | 3      |
| MAT       | 122         | College Algebra II                          | 3      | 0     | 3      |
| MAT       | 123         | College Algebra III                         | 3      | ō     | 3      |
|           |             |   | Ŭ      | Ŭ     | , i    |
|           |             | burse sequence:                             | 0      | 0     | 4      |
| BIO       | 101         | Biology I-Principles of Biology             | 3      | 2     | 4      |
| BIO       | 102         | Biology II-Zoology                          | 3      | 2     |        |
| BIO       | 103         | Biology III-Botany                          | 3      | 2     | 4      |
| СНМ       | 101         | Or<br>Chemistry I                           | 3      | 2     | 4      |
| CHM       | 101         | Chemistry I                                 | 3      | 2     | 4      |
|           | 102         | Chemistry II                                |        | 2     |        |
| СНМ       | 103         | Chemistry III                               | 3      | 2     | 4      |
| PHY       | 201         | or<br>Physica I                             | 3      | 2     | 4      |
|           | 201         | Physics I                                   |        | 2     | 4      |
| PHY       | 202         | Physics II                                  | 3<br>3 | 2     | 4      |
| PHY       | 203         | Physics III                                 | 3      | 2     | 4      |

### Physical Education (3 Quarter Hours)

Select three, one-hour courses or PED 116 or SAF 106

### Electives (24 Quarter Hours)

Electives include courses from the Associate in Arts and Associate in Science and technology programs including the following:

| ART | 105 | Western Civilization Art History       | 3 | 0 | 3 |
|-----|-----|--|---|---|---|
| ART | 204 | Advanced Painting Seminar              | 2 | 2 | 3 |
| ART | 206 | Elements of Film                       | 3 | 0 | 3 |
| CHM | 100 | Chemistry - An Introduction            | 2 | 2 | 3 |
| CHM | 110 | Introduction to Organic Chemistry      | 3 | 2 | 4 |
| EDU | 103 | Psychological Development of the child | 1 | 0 | 1 |
| ENG | 100 | Basic English Skills                   | 3 | 0 | 3 |
| ENG | 216 | Walden                                 | 1 | 0 | 1 |
| ENG | 217 | Poetry of Robert Frost                 | 1 | 0 | 1 |
| JOU | 116 | Journalism I                           | 3 | 0 | 3 |
| JOU | 117 | Journalism II                          | 3 | 0 | 3 |
| DES | 118 | Publication Design and Production I    | 2 | 2 | 3 |
| DES | 119 | Publication Design and Production II   | 2 | 2 | 3 |
| DES | 120 | Publication Design and Production III  | 2 | 2 | 3 |
| DES | 121 | Publication Design and Production IV   | 2 | 2 | 3 |
| ENG | 209 | Creative Writing Workshop              | 3 | 0 | 3 |
| MAT | 106 | Math for Pharmacology                  | 3 | 0 | 3 |
| POL | 204 | Great Decisions - Foreign Policy       | 3 | 0 | 3 |
| POL | 205 | The U.S. Constitution                  | 1 | 0 | 1 |
|     |     |  |   |   |   |

## SUGGESTED SEQUENCE OF COURSES **ASSOCIATE IN GENERAL EDUCATION- G020**

|          |      |   | HOURS |     | -      |
|----------|------|---|-------|-----|--------|
| FIRST Y  |      |   | CLASS | LAB | CREDIT |
| ENG      | 0130 | English Grammar & Composition   | 3     | 0   | 3      |
| SPH      | 0204 | Fundamentals of Speech  | 3     | 0   | 3      |
|          |      | Science Sequence (select one)   | 3     | 2   | 4      |
|          |      | BIO 0101; CHM 0101; PHY 0201  |       |     |        |
|          |      | History Sequence (select one) HIS 0101 or 0110;                         | 3     | 0   | 3      |
|          |      | Fine Arts Selection (select one) ART 0101, ART 0205; DRA 0107; MUS 0101 | 3     | 0   | 3      |
|          |      | Physical Education  |       | 2   | 1      |
|          |      | Trysical Education  | _0 _  | _2  |        |
|          |      |   | 15    | 4   | 17     |
| Winter C |      |   |       |     |        |
| ENG      | 0131 | Composition & Intro to Literature                                       | 3     | 0   | 3      |
|          |      | Science Sequence Continued BIO 0102; CHM 0102; PHY 0202                 | 3     | 2   | 4      |
|          |      | History Sequence Continued HIS 0102 or 0111                             | 3     | 0   | 3      |
|          |      | Fine Arts Selection (select one) ART 0101; 0205; DRA 0107; MUS 0101     | 3     | 0   | 3      |
|          |      | Social Science/Humanities Selection                                     | 3     | 0   | _3     |
|          |      | •   | 15    | 2   | 16     |

|                          |  |        | HOUR | S      |
|--------------------------|--|--------|------|--------|
|                          |  | CLASS  | LAB  | CREDIT |
| Spring Quarter           |  |        |      |        |
| ENG 0132                 | Composition/Research/Documentation           | 3      | 0    | 3      |
|                          | Science Sequence Continued                   | 3      | 2    | 4      |
|                          | BIO 0103; CHM 0103; PHY 0203                 | 0      | _    |        |
|                          | History Sequence Continued HIS 0103 or 0112  | 3      | 0    | 3      |
|                          | Social Science Sequence/Humanities Selection | 3      | 0    | 3      |
|                          | Elective                                     | 3      | 0    | 3      |
|                          | Licetive                                     |        |      |        |
|                          |  | 15     | 2    | 16     |
| SECOND YEAR              |  |        |      |        |
| Fall Quarter<br>MAT 0121 | College Algebra I                            | 0      | 0    | 0      |
| MAI UIZI                 | Literature Selection                         | 3<br>3 | 0    | 3<br>3 |
|                          | Physical Education                           | 0      | 2    | 1      |
|                          | Social Science/Humanities Selection          | 3      | 0    | 3      |
|                          | Fine Arts Selection                          | 3      | 0    | 3      |
|                          | Elective                                     | _3     | 0    | 3      |
|                          |  | <br>15 | 2    | 16     |
| Winter Quarter           |  | .0     | _    | 10     |
| MAT 0122                 | College Algebra II                           | 3      | 0    | 3      |
|                          | Social Science/Humanities Selection          | 3      | 0    | 3      |
|                          | Physical Education                           | 0      | 2    | 1      |
|                          | Elective                                     | 3      | 0    | 3      |
|                          | Elective                                     | 3      | 0    | 3      |
|                          | Elective                                     | 3      | 0    | _3     |
|                          |  | 15     | 2    | 16     |
| Spring Quarter           |  |        |      |        |
| Mat 0123                 | Trigonometry                                 | 3      | 0    | 3      |
|                          | Social Sciences/Humanities Selection         | 3      | 0    | 3      |
|                          | Elective                                     | 3      | 0    | 3      |
|                          | Elective                                     | 3      | 0    | 3      |
|                          | Elective                                     | 3      | _0   | _3     |
|                          |  | 15     | 0    | 15     |

Total credit hours required for graduation = 96

### ASSOCIATE IN APPLIED SCIENCE **DEGREE PROGRAMS**

# ASSOCIATE DEGREE NURSING (REGISTERED NURSING) (T059)

The Associate Degree Nursing program is offered through the Foothills Nursing Consortium, a cooperative effort of Cleveland Community College, Isothermal Community College, and McDowell Technical Community College.

The Associate Degree Nursing curriculum is designed to prepare graduates to integrate the principles and theories of nursing and the sciences in utilizing the nursing process in the practice of nursing. The practice of nursing by associate degree nursing graduates consists of assessing the patient's physical and mental health, including the patient's reaction to illness and treatment regimens; recording and reporting the results of the nursing assessment; planning, initiating, delivering, and evaluating appropriate nursing acts; teaching, delegating to or supervising other personnel in implementing the treatment regimen; collaborating with other health care providers in determining the appropriate health care for a patient; implementing the treatment and pharmaceutical regimen prescribed by any person authorized by state law to prescribe such a regimen; providing teaching and counseling about the patient's health care; reporting and recording the plan for care, nursing care given, and the patient's response to that care; and supervising, teaching, and evaluating those who perform or are preparing to perform nursing functions.

Graduates are eligible to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a registered nurse.

Individuals desiring a career in registered nursing must take biology, algebra and chemistry courses prior to entering the program.

### ADMISSION AND PROGRAM REQUIREMENTS

Courses required to meet graduation requirements in this program are offered during daytime hours.

Graduates of this program will be awarded the Associate in Applied Science Degree in Nursing.

# ADMISSION PROCESS - First (Year) Level

The following requirements must be met before you will be considered for admission to the ADN program. All material must be sent to the Admissions Office of your respective college.

- Complete application. 1.
- Provide official high school transcript or GED scores. 2.
- Submit an official transcript(s) from all the colleges you have 3. attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
- Submit three (3) references (not relatives or close friends). 4. Example: teachers, employers, guidance counselors. References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Must use forms provided.)
- Complete placement tests which will be administered at the 5. college. Applicants will be informed as to the time and place of tests. The placement tests consists of Reading, English/ Writing Skills, Numerical Skills and Algebra (4 tests). Applicants who have completed college level courses in English and Algebra at an accredited college(s) with a grade of "C" or better are exempt from the tests. Completion of only one of the above will require testing in the other area. Developmental or Enrichment courses completed at an accredited college with a grade of "C" or better may also be considered in determining placement test exemptions.

Exemption is also granted for those with (a) a minimum SAT score of 450 Verbal and 450 math or (b) an ACT score of 17 or better

- Complete all developmental courses required as a result of placement tests with a grade of "C" or better.
- Prerequisite courses: You are required to have completed courses in algebra, chemistry, and biology in high school (complete high school unit) or college with a grade of "C" or better. If you have not taken classes, you must complete them in college with a grade of "C" or better before consideration into the program. Algebra may be required from placement scores, even if a high school or college algebra course was successful. Prerequisite courses are not accepted from the Adult High School Diploma Program unless the student is a graduate of the program.

You are responsible for making sure these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission into the program.

### SELECTION PROCESS

- 8. All seven general admission requirements must be met.
- 9. If notified by the Admissions Office, eligible applicants report for the PSB-Nursing School Aptitude Examination-RN. (Fee \$10.00) The Health Form will be provided with the letter of notification for the PSB-RN exam.
- If indicated, an interview will be scheduled with an admissions 10. counselor and the nursing director/faculty.
- Final selection for admission is based on a review of the can-11. didates academic record, test results, interview responses and favorable results of the physical, and emotional examinations. Written notification of acceptance will be sent by the Admissions Office and ADN Director.

All students accepted into the Associate Degree Nursing program will be required to carry health insurance.

All students must provide proof of cardiopulmonary resuscitation (CPR) certification on the first day of class Fall quarter.

If there are any questions contact the Admissions Office at your respective college.

Required Courses: Students may take general/related (nonnursing) courses before acceptance in the nursing program.

Required science courses must be completed with a grade of "C" or better.

Completion of these courses will help prepare but no guarantee admission into the program.

Persons admitted to the ADN program will attend an orientation program prior to initial enrollment.

Graduates of the ADN program are eligible to take the National Council Licensure Examinatin (NCLEX-RN) which is required to practice as a registered nurse.

Enrollment in the Associate Degree Nursing program is limited. Applicants are advised to apply early.

All applicants must be updated annually. If you have applied previously, you must initiate the process including PSB-Nursing Aptitude Exam retesting.

### ADMISSION REQUIREMENTS - Second (Year) Level

The following requirements must be met before you will be considered for admission to the ADN program. All materials must be sent to the Admissions Office of your respective college.

- 1. Completed application.
- Provide official high school transcript or GED scores. 2.
- Submit an official transcript(s) from all the colleges you have 3. attended. Each transcript must reflect a 2.0 grade point average on courses accepted for transfer credit.
- Complete placement tests which will be administered at the college to which you apply. Applicants will be informed as to the time and place of tests. The placement tests consists of Reading, English/Writing Skills, Numerical Skills and Algebra (4 tests). Applicants who have completed college level courses in English and Algebra at an accredited college(s) with a grade of "C" or better are exempt from the tests. Development or Enrichment courses completed at an accredited college with a grade of "C" or better may also be considered in determining placement test exemptions. Exemption is also granted for those with (a) minimum SAT score of 450 Verbal and 450 math or (b) an ACT score of 17 or better.
- Complete all developmental courses required as a result of 5. placement tests with a grade of "C" or better.
- Prerequisite courses: You are required to have completed 6. courses in algebra, chemistry, and biology\* in high school (complete high school unit) or college with a grade of "C" or better. If you have not taken classes, you must complete them in college with a grade of "C" or better before consideration into the program. Prerequisite courses are not accepted from the Adult High School Diploma Program unless the student is a graduate of the program. Algebra may be required from placement test scores, even if a high school or college algebra course was successful.
  - \*Advance Placement students who have completed non-college Anatomy and Physiology in a Practical Nurse program, with a grade of "C" or above, will be exempt from a prereguisite Biology Course.
- Submit official copy of college, Practical Nursing or other Nurs-7. ing Program transcripts (course syllabi may be required).
- Submit evidence of current unrestricted license as a Practical 8. Nurse in the state of North Carolina, Unrestricted license must also be current at the time of acceptance into the program.
- Submit (3) three references, (not relatives or close friends) one 9. of which must be a work reference if applicable. Example: teachers, employers, counselors. References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Must use forms provided.)

10. First year non-nursing courses (general/related) and Anatomy and Physiology II must be in progress if series is not completed.

You are responsible for making sure these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.

Completion of these requirements will not guarantee admission into the program.

### SELECTION PROCESS AND REQUIREMENTS

- 11. The above criteria must be met to be eligible to take the challenge exam.
- Report for the challenge exam when notified by the admissions 12. office. (Fee \$35.00)
- If eligible the Admissions Office will notify students to report 13. for the PSB-Nursing School aptitude Examination R.N. (Fee \$10.00)
- If indicated, an interview will be scheduled with an admissions 14. counselor and the Nursing Director/Faculty.
- If eligible, you will be notified when and where to register for 15. the nursing transition course (NUR 100). Health forms will be provided with notification to register for NUR 100.
- LPNs must complete the nursing role transition course NUR 16. 100 with a grade of "C" or above prior to Summer admission. Anatomy and Physiology III may be taken with NUR 100.
- Before summer admission must complete the first year non-17. nursing courses with a grade of "C" or above:

| ICC     | CCC     | MTCC                    |
|---------|---------|-------------------------|
| BIO 270 | BIO 107 | BIO 201                 |
| BIO 271 | BIO 108 | BIO 202                 |
| BIO 272 | BIO 109 | BIO 203                 |
| PSY 260 | PSY 101 | PSY 110 (Prior to 1991) |
| PSY 261 | PSY 238 | PSY 111 `               |
| NUT 160 | NUT 101 | NUT 101                 |

Final selection for admission is based on a review of the can-18. didates academic record, test results, interview responses and favorable results of the physical and emotional examinations. NUR 100 must also be completed with a grade of "C" or better. Written notifications of acceptance will be sent by the Admissions Officer and ADN Director.

### APPLICATION DECISION PROCESS FOR FIRST AND SECOND YEAR APPLICANTS

Prospective nursing candidates residing in the four-service area counties of North Carolina should apply to their respective colleges. Other applicants may apply to the college of their convenience. Priority will be given to service area applicants first, then other North Carolina residents, then out-of-state residents.

Applications will be accepted as openings occur with priority given on the basis of the highest cumulative average on the nursing aptitude exam, nursing challenge exam, and the interview.

Should openings develop for which no qualified service area applicants are available, priority will be given on the basis of highest scores to qualified applicants from the service areas of the other consortium colleges.\*

\*Any duplication of scores and completion dates will be resolved on the basis of highest average on prerequisite courses.

Any person completing the admissions requirements and not accepted to the fall or summer class may reapply for admission and request PSB-Nursing School Aptitude Exam-RN retesting the following year. The more recent test score will be used for admission consideration.

Persons re-applying will be considered by the above criteria. Applications must be updated annually.

### INTRA-CONSORTIUM TRANSFER/RE-ENTRY POLICY

All requests for transfer between consortium-member colleges (including re-entry transfers) into the nursing program must be approved by the Admissions Director and the Nursing Director prior to implementation.

Only one re-entry for course failure will be considered between consortium-member colleges or from other nursing programs.

### TRANSFER WITHIN THE FOOTHILLS NURSING CONSORTIUM INSTITUTIONS

Students will comply with the following:

- Completion of admission requirements as stated in the Ad-1. mission Policy-Admission for First Year Students or Advanced Placement Students.
- Written notification by the student, to the Consortium Director 2. and Admissions Director of the desired college of intent to transfer.
- A student placed on academic warning and/or academic pro-3. bation at one institution will retain that status with transfer to another institution within the Consortium.
- Individual consideration will be determined by the circumstan-4. ces, admission decision process and space availability.

### STUDENTS DESIRING ADMITTANCE AND TRANSFER OF CREDITS FROM SCHOOLS OUTSIDE THE CONSORTIUM

Students will comply with the following:

- Completion of the admission requirements as stated in the 1. Admission Policy-Admission for First Year Students, or Advanced Placement Students.
- Written notification by the student to the Consortium Director 2. and Admission Director of the desired college of intent to transfer.
- Submission of transcripts from former nursing program(s) and 3. other post-secondary work for which the student requests transfer credit.
- Transcripts are evaluated by the desinated individual at the 4. institution and the Consortium Director. They determine course eligibility for transfer credit.
- Individual institutional policy will determine the acceptance of 5. credits for transfer into the nursing curriculum.
- Completion of Challenge Exams is required if nursing courses 6. submitted for transfer credit are more than two years old as evidenced by the date of completion of the course(s).
- Admission decision process in the admission policies will be 7. applicable.

Upon completion of the program graduates should be able to:

- 1. Utilize the nursing process when caring for individuals.
- Perform technical skills and current technology at a safe level. 2.
- 3. Function in the role of provider of care, manager of care, and member within the discipline of nursing.
- Function within a variety of health care settings where there is 4. recourse to supervision from a more experienced, better prepared person (nurse) and where procedures and protocols are established.
- Be accountable and practice within the ethical and legal frame-5. work of nursing.
- 6. Apply principles of the biological, physical, social and behavioral sciences in performing independent, dependent and interdependent nursing functions.
- Manage nursing care for patients with common, well-defined 7. health problems.

# FOOTHILLS NURSING CONSORTIUM - CURRICULUM PLAN ASSOCIATE DEGREE NURSING, REGISTERED NURSING (T059) Cleveland Community College

|            |              |  |          | Hours F | er Week  |                 |
|------------|--------------|--|----------|---------|----------|-----------------|
|            |              |  | Class    | Lab     | Clinical | Credit<br>Hours |
|            |              |  |          |         |          | nours           |
| FIRST Y    |              |  |          |         |          |                 |
|            | arter - Fal  |  |          |         |          |                 |
| BIO        | 0107         | Anatomy and Physiology I               | 3        | 2       | 0        | 4               |
| NUR        | 0101         | Basic Concepts in Nursing              | 6        | 4       | 3        | 9               |
| PHM        | 0102         | Pharmacological Concepts in            | 3        | 0       | 0        | 3               |
| AULT       | 0404         | Nursing                                |          | •       | •        |                 |
| NUT        | 0101         | Nutrition and Diet Therapy             | _3       | _0      | _0       | _3              |
|            |              |  | 15       | 6       | 3        | 19              |
| Second     | Quarter -    | Winter                                 |          |         |          |                 |
| BIO        | 0108         | Anatomy and Physiology II              | 3        | 2       | 0        | 4               |
| NUR        | 0103         | Nursing Care of Adults I               | 4        | 2       | 12       | 9               |
| PSY        | 0101         | Introduction to Psychology             | 3        | _0      | 0        | 3               |
|            |              |  | 10       | 4       | 12       | 16              |
|            |              |  | 10       | 7       | 12       | .0              |
|            | uarter - Sp  |  |          |         |          |                 |
| BIO        | 0109         | Anatomy and Physiology III             | 3        | 2       | 0        | 4               |
| PSY        | 0208         | Human Growth and Development           | 3        | 0       | 0        | 3               |
| NUR        | 0104         | Nursing Care of Adults II              | _4       | _0      | 12       | 8               |
|            |              |  | 10       | 2       | 12       | 15              |
| NUR        | 0100*        | Nursing Role Transition                | 3        | 2       | 0        | 4               |
| •          |              | Placement Students only on demand      | . This c | ourse   |          |                 |
| may al     | so be taug   | tht at other times.)                   |          |         |          |                 |
|            |              |  |          |         |          |                 |
| Fourth C   | Quarter - S  | Summer                                 |          |         |          |                 |
| BIO        | 0205         | Microbiology I                         | 3        | 2       | 0        | 4               |
| BIO        | 0206         | Microbiology II                        | 2        | 1       | 0        | 2               |
| SOC        | 0101         | Introduction to Sociology              | 3        | 0       | 0        | 3               |
| NUR        | 0105         | Mental Health Nursing                  | 5        | _0      | 12       | _9              |
|            |              |  | 13       | 3       | 12       | 18              |
|            |              |  |          |         |          |                 |
| SECONI     |              |  |          |         |          |                 |
|            | arter - Fal  |  | 0        |         |          | 0               |
| ENG        | 0130         | Grammar and Composition                | 3<br>4   | 0       | 0<br>12  | 3               |
| NUR<br>CAS | 0201<br>0101 | Nursing Care of Older Adults           | 4        | 0       | 0        | 8<br>4          |
| CAS        | 0101         | Introduction to Computer Technology    | 4        | U       | U        | 4               |
|            |              | reciliology                            |          |         |          | 45              |
|            |              |  | 11       | 0       | 12       | 15              |
| Sixth Qu   | arter - Wi   | nter                                   |          |         |          |                 |
| ENG        | 0131         | Composition and Introduction to        | 3        | 0       | 0        | 3               |
|            |              | Literature                             |          |         |          |                 |
| NUR        | 0202         | Nursing Care of the Childbearing       | 5        | 0       | 12       | 9               |
|            |              | Family (1/2 quarter)                   |          |         |          |                 |
| NUR        | 0203         | Nursing Care of Children (1/2 quarter) | 5        | 0       | 12       | 9               |
|            |              | Free Elective                          | _3       | _0      | _0       | _3              |
|            |              |  | 16       | 0       | 24       | 24              |
|            |              |  |          |         |          |                 |

| Seventh             | Quarter        | - Spring                        |    |   |    |     |
|---------------------|----------------|---------------------------------|----|---|----|-----|
| ENG                 | 0132           | Composition/Research/           | 3  | 0 | 0  | 3   |
|                     |                | Documentation                   |    |   |    |     |
| NUR                 | 0204           | Nursing Care of Adults III      | 5  | 0 | 15 | 10  |
| NUR                 | 0205           | Nursing Perspectives and Issues | _3 | 0 | 0  | _3  |
|                     |                |                                 | 11 | 0 | 15 | 16  |
| TOTAL CREDIT HOURS: |                |                                 |    |   |    | 123 |
| (with               | (with NUR 100) |                                 |    |   |    |     |

A prospective associate degree nursing student may enroll in any course listed above with the exception of those courses with an NUR prefix. SPECIAL NOTE: Science courses (BIO 107, 108, 109, 205, 206) require a grade of "C" or better and may be repeated only once.



## ASSOCIATE IN APPLIED SCIENCE **DEGREE PROGRAMS**

# COMMUNICATIONS TECHNOLOGY (T154)

The Communications Technology curriculum prepares individuals to enter the communications field in industry or education. Students will acquire technical and professional experiences in various aspects of media production.

Graduates may be employed as media technicians by industrial education departments, libraries, public schools, community colleges, universities, medical centers or other educational facilities. The program will provide students with a broad range of skills from which they may choose to specialize. Technicians may have duties including photography, graphic arts, producing, directing, equipment maintenance and others.

Upon successful completion of the program Communications Technology students will have the ability to:

- Demonstrate the use of the equipment in correct procedure 1. and technique in producing composition.
- Perform the use of the studio equipment for production, titling, 2. effects, lighting, and audio.
- Demonstrate knowledge of the various formats for effective 3. writing for radio, television, newspaper, and script writing.
- Demonstrate knowledge of the history of the media develop-4. ment and the means of informing and influencing the public views.
- Demonstrate knowledge of the performance of the complete 5. videotaping of a production.
- Understanding mechanical and electrical operations of equip-6. ment for locating, troubleshooting, maintenance, and minor repair to equipment.
- Demonstrate knowledge of and the ability to perform com-7. puter-generated television images, from titling to animation.
- Demonstrate knowledge of the legal and moral principles that 8. have influenced and continue to influence conduct in media communication.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses | Credit Hours | Related Courses      | Credit Hours |
|---------------|--------------|----------------------|--------------|
| RTV 100       | 4            | ART 102              | 3            |
| RTV 101       | 4            | ART 205              | 3            |
| RTV 102       | 3            | BUS 204              | 4            |
| RTV 103       | 4            | DRA 105              | 3            |
| RTV 104       | 3            | DRA 106              | 3            |
| RTV 200       | 4            | CAS 101              | 4            |
| RTV 201       | 5            | ELN 100              | 4            |
| RTV 202       | 4            | MAT 117              | _4           |
| RTV 205       | 3            |                      | 28           |
| RTV 206       | 3            | Ormanal Education Co |              |
| RTV 207       | 4            | General Education Co |              |
| RTV 208       | 3            | ENG 105              | 3            |
| PHO 101       | 3            | ENG 130              | 3            |
| PHO 102       | 3            | ENG 131              | 3            |
| RTV 118       | _3           | ENG 132              | 3            |
| 1117 110      |              | SPH 204              | 3            |
|               | 53           | SOC 101              | _3           |
|               |              |                      | 18           |
|               |              | Work Experience/Elec | tive 6       |

Total hours required for graduation = 105

### SUGGESTED SEQUENCE OF COURSES **COMMUNICATIONS TECHNOLOGY -T154**

|          |         |                                    | HOURS |     |        |
|----------|---------|------------------------------------|-------|-----|--------|
|          |         |                                    | CLASS | LAB | CREDIT |
| FIRST Y  | EAR     |                                    |       |     |        |
| Fall Qua | arter   |                                    |       |     |        |
| ELN      | 0100    | Introduction to Electronics        | 4     | 0   | 4      |
| SOC      | 0101    | Introduction to Sociology          | 3     | 0   | 3      |
| RTV      | 0100    | Intro to TV & Cable Production     | 3     | 2   | 4      |
| RTV      | 0118    | Basic Film Technology              | 2     | 2   | 3      |
| ENG      | 0130    | English Grammar & Composition      | 3     | 0   | _3     |
|          |         |                                    | 15    | 4   | 17     |
| Winter ( | Quarter |                                    |       |     |        |
| ENG      | 0131    | Composition & Intro to Literature  | 3     | 0   | 3      |
| RTV      | 0101    | Advanced TV & Cable Production     | 3     | 2   | 4      |
| RTV      | 0103    | Media Writing                      | 3     | 2   | 4      |
| CAS      | 0101    | Intro to Computer Technology       | 4     | 0   | 4      |
| MAT      | 0117    | Intro to Statistics                | 4     | 0   | 4      |
|          |         |                                    | 17    | 4   | 19     |
| Spring ( | Quarter |                                    |       |     |        |
| ENG      | 0132    | Composition/Research/Documentation | 3     | 0   | 3      |
| ENG      | 0105    | Masterpieces of World Literature   | 3     | 0   | 3      |
| ART      | 0102    | Beginning Drawing                  | 2     | 2   | 3      |
| RTV      | 0102    | Intro to AV Equipment & Basic Prod | 2     | 2   | 3      |
| RTV      | 0104    | Intro to Mass Communications       | 3     | 0   | 3      |
|          |         | Elective                           | _3    | 0   | _3     |
|          |         |                                    | 16    | 4   | 18     |

| SECON<br>Fall Qua | D YEAR<br>arter |                              |    |    |    |
|-------------------|-----------------|------------------------------|----|----|----|
| ART               | 0205            | Film Appreciation            | 3  | 0  | 3  |
| RTV               | 0207            | Video Graphics               | 3  | 2  | 4  |
| PHO               | 0101            | Fundamentals of Photography  | 2  | 2  | 3  |
| DRA               | 0105            | Theatrical Performance       | 2  | 2  | 3  |
| RTV               | 0200            | Media Production I           | _3 | 2  | 4  |
| 1117              | 0200            | Wedia i Todaction i          |    |    |    |
|                   |                 |                              | 13 | 8  | 17 |
| Winter (          | Quarter         |                              |    |    |    |
| PHO               | 0201            | Intro to Color Printing      | 2  | 2  | 3  |
| DRA               | 0106            | Dramatic Production          | 2  | 2  | 3  |
| RTV               | 0201            | Media Production/Lab Project | 0  | 10 | 5  |
| RTV               | 0205            | Equipment Repair             | 2  | 2  | 3  |
| RTV               | 0208            | Law and Ethics               | 3  | 0  | 3  |
|                   |                 |                              |    |    |    |
|                   |                 |                              | 9  | 16 | 17 |
| Spring            |                 |                              |    |    |    |
| RTV               | 0202            | Media Production II          | 3  | 2  | 4  |
| RTV               | 0206            | Lighting & Sound             | 2  | 2  | 3  |
| SPH               | 0204            | Fundamentals of Speech       | 3  | 0  | 3  |
| BUS               | 0204            | Business Communications      | 4  | 0  | 4  |
|                   |                 | Elective                     | _3 | _0 | _3 |
|                   |                 |                              | 15 | 4  | 17 |

Total credit hours required for graduation = 105



### CRIMINAL JUSTICE ASSOCIATE IN APPLIED SCIENCE DEGREE

### CRIMINAL JUSTICE-PROTECTIVE SERVICE TECHNOLOGY (T129)

The criminal justice program is designed to prepare individuals for entry-level positions in law enforcement and correctional agencies and to upgrade the skills of those who are currently employed and seek promotion.

All criminal justice students take courses in psychology, sociology, and criminology in an effort to understand the causes, prevention, and correction of crime in our society.

Many graduates transfer credits to four-year colleges and universities in order to prepare for careers in criminal justice management, probation and parole, and law.

The criminal justice program prepares individuals to apply social science concepts and analytical methods to the complex and rapidly changing system of justice and social control. The development of a broad understanding of the system and general decision-making and problem-solving skills is intended to assist the student in dealing with problems in criminal justice agencies.

Cleveland Community College has chosen to offer the "Generalist Model" for enhancement to the surrounding community.

Upon program completion, the student will be able to:

- State the functions, responsibilities, and general legal param-1. eters of the criminal justice system, including the courts, corrections, and law enforcement.
- 2. Perform the tasks of the basic investigator.
- Perform tasks required of a law enforcement patrol officer. 3.
- Demonstrate a basic working knowledge of criminalistics. 4.
- Perform writing skills using correct diction and style as it ap-5. plies to the work place and society.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses | Credit Hours | Related Courses           | Credit Hours  |
|---------------|--------------|---------------------------|---------------|
| CJC 120       | 5            | POL 102                   | 3             |
| CJC 121       | 5            | POL 103                   | 3             |
| CJC 122       | 3            | PHO 101                   | 3             |
| CJC 123       | 5            | MAT 121                   | 3             |
| CJC 124       | 5            | CAS 101                   | 4             |
| CJC 125       | 5            | CAS 102                   | 4             |
| CJC 126       | 5            | SOC 202                   | _3            |
| CJC 231       | 5            | 333 232                   | 23            |
| CJC 232       | 5            |                           | 23            |
| CJC 233       | 5            | Choose 7 hours from       | the following |
| CJC 234       | 5            | Related Course Electives  |               |
| CJC 235       | 5            | CJC 190                   | 3             |
| CJC 236       | 5            | CJC 191                   | 3             |
| CJC 237       | 3            | CJC 192                   | 3             |
|               | 66           | CJC 193                   | 3             |
|               | 00           | BIO 101                   | 4             |
|               |              | CHM 100                   | 3             |
|               |              | SPA 160                   | 4             |
|               |              |                           |               |
|               |              | General Education Cour    | rses          |
|               |              | ENG 130                   | 3             |
|               |              | ENG 131                   | 3             |
|               |              | ENG 132                   | 3             |
|               |              | SPH 204                   | 3             |
|               |              | PSY 101                   | 3             |
|               |              | PSY 201                   | 3             |
|               |              | SOC 101                   | _3            |
|               |              |                           | 21            |
|               |              | Work Experience/and/or    |               |
|               |              | Internship and/or Free I  |               |
|               |              | internating and/or Free t | LIGOTIVE /    |

# SUGGESTED SEQUENCE OF COURSES CRIMINAL JUSTICE/PROTECTIVE SERVICE TECHNOLOGY (T129)

Total hours required for graduation = 120

|         |       |                                  |       | S   |        |
|---------|-------|----------------------------------|-------|-----|--------|
|         |       |                                  | CLASS | LAB | CREDIT |
| FIRST   | /EAR  |                                  |       |     |        |
| Fall Qu | arter |                                  |       |     |        |
| CJC     | 120   | Introduction to Criminal Justice | 5     | 0   | 5      |
| CJC     | 121   | Criminology                      | 5     | 0   | 5      |
| POL     | 103   | Government - State and Local     | 3     | 0   | 3      |
| ENG     | 130   | English Grammar & Composition    | 3     | 0   | 3      |
|         |       | Elective                         | _3    | _2  | _4     |
|         |       |                                  | 19    | 2   | 20     |

| Winter   | Quarter    |   |          |    |       |
|----------|------------|---|----------|----|-------|
| CJC      | 122        | Substance Abuse                           | 3        | 0  | 3     |
| CJC      | 123        | Juvenile Delinguency                      | 5        | 0  | 5     |
| CJC      | 124        | Criminal Law                              | 5        | 0  | 5     |
| POL      | 102        | Government - National                     | 3        | 0  | 3     |
|          |            |   | 3        | 0  | 3     |
| MAT      | 121        | College Algebra I                         |          |    |       |
| ENG      | 131        | Composition & Intro. to Literature        | _3       | _0 | _3    |
|          |            |   | 22       | 0  | 22    |
| Spring   | Quarter    |   |          |    |       |
| CJC      | 125        | Constitutional Law                        | 5        | 0  | 5     |
| CJC      | 126        | Community Relations and Ethics            | 5        | 0  | 5     |
|          |            |   |          |    |       |
| PHO      | 101        | Fundamentals of Photography               | 2        | 2  | 3     |
| ENG      | 132        | Composition, Research, & Docu.            | 3        | 0  | 3     |
| SOC      | 101        | Introduction to Sociology                 | 3        | 0  | 3     |
|          |            | Elective                                  | _3       | _0 | 3     |
|          |            |   | 21       | 2  | 22    |
| CECON    | D YEAR     |   | 21       | _  | 22    |
|          |            |   |          |    |       |
| Fall Qua |            | Inter-develop to Law Enforcement          | _        | •  | _     |
| CJC      | 231        | Introduction to Law Enforcement           | 5        | 0  | 5     |
| CJC      | 232        | Crisis Intervention & Management          | 5        | 0  | 5     |
| CAS      | 101        | Introduction to Computer Tech.            | 4        | 0  | 4     |
| SPA      | 204        | Fundamentals of Speech                    | _3       | 0  | _3    |
|          |            |   | 17       | 0  | 17    |
| Winter   | Quarter    |   |          | Ŭ  | • • • |
| CJC      | 233        | Introduction to Corrections               | 5        | 0  | 5     |
|          | 234        |   |          |    |       |
| CJC      |            | Criminal Justice Organization/Supervision | 5        | 0  | 5     |
| CAS      | 102        | Microcomputer Applications                | 4        | 0  | 4     |
| PSY      | 101        | Introduction to Psychology                | _3       | _0 | _3    |
|          |            |   | 17       | 0  | 17    |
| Spring   | Quarter    |   |          | ŭ  | • • • |
| CJC      | 235        | Counseling                                | 5        | 0  | 5     |
| CJC      | 236        | Security, Protection, and Loss Control    |          |    | 5     |
|          |            |   | 5        | 0  |       |
| CJC      | 237        | Seminar in Criminal Justice Issues        | 5        | 0  | 5     |
| SOC      | 202        | Marriage and Family                       | 3        | 0  | 3     |
| PSY      | 201        | Abnormal Psychology                       | 3        | 0  | 3     |
|          |            | Work Experience/Internship/Electives      | _0       | 10 | 1     |
|          |            |   | 21       | 10 | 22    |
| Sunnes   | ted Electi | vos                                       | 21       | 10 | 22    |
| BIO      | 101        | Biology I - Principles of Biology         | 3        | 2  | 4     |
| CHM      | 101        | Chemistry—An Introduction                 |          | 2  |       |
|          |            | •   | 2        |    | 3     |
| CJC      | 190        | Criminal Investigations I                 | 3        | 0  | 3     |
| CJC      | 191        | Criminal Investigations II                | 3        | 0  | 3     |
| CJC      | 192        | Introduction to Criminalistics            | 2        | 2  | 3     |
| CJC      | 193        | Correctional Law                          | 3        | 0  | 3     |
| SPA      | 160        | Fundamentals of Spanish I                 | <u>3</u> | _2 | _4    |
|          |            |   | 19       | 8  | 23    |

### RADIOLOGIC TECHNOLOGY

# ASSOCIATE IN APPLIED SCIENCE DEGREE RADIOLOGIC TECHNOLOGY (RADIOGRAPHY) (T061)

The Radiologic Technology curriculum prepares graduates to be competent Medical Radiographers. The radiographer is a skilled person qualified by technological education to provide patient services using imaging modalities (as directed by physicians qualified to order and/or perform radiologic procedures) by applying knowledge of the principles of radiation protection for patient, self and others; by applying knowledge of anatomy, positioning, and radiographic techniques to accurately demonstrate anatomical structures on a radiograph; by determining exposure factors to achieve optimum radiographic technique with a minimum of radiation exposure to the patient; by examining radiographs for the purpose of evaluating technique, positioning, and other pertinent technical qualities; by exercising discretion and judgment in the performance of medical imaging procedures; by providing patient care essential to radiologic procedures; and by recognizing emergency patient conditions and initiating life saving first aid.

Graduates may be employed in radiology departments in hospitals, clinics, physicians' offices, research and medical laboratories, federal and state agencies and industry.

Graduates are eligible to take the national examination given by the American Registry of Radiologic Technologists for certification and registration as medical radiographers.

Individuals desiring a career in radiologic technology should take courses in biology, algebra, and chemistry and/or physics prior to entering the program.

Upon completion of the program, the radiographer will be able to:

- Apply knowledge of the principles of radiation protection for the patient, self and others.
- Apply knowledge of anatomy, positioning and radiographic 2. techniques to accurately demonstrate anatomical structures on a radiograph.
- Determine exposure factors to achieve optimum radiographic 3. technique with a minimum of radiation exposure to the patient.
- Examine radiographs for the purpose of evaluating technique, 4. positioning and other pertinent technical qualities.
- Exercise discretion and judgment in the performance of med-5. ical imaging procedures.
- Provide patient care essential to radiologic procedures. 6.
- Recognize emergency patient conditions and initiating lifesav-7. ing first aid.

### COURSE AND HOUR REQUIREMENTS

| Major Courses | Credit Hours | Related Courses    | Credit Hours |
|---------------|--------------|--------------------|--------------|
| RAD 101       | 4            | BIO 107            | 4            |
| RAD 102       | 4            | BIO 108            | 4            |
| RAD 103       | 3            | PHY 107            | 4            |
| RAD 104       | 4            | MAT 121            | 3            |
| RAD 105       | 1            | MAT 122            | 3            |
| RAD 106       | 5            | MAT 123            | 3            |
| RAD 110       | 1            | CAS 102            | _4           |
| RAD 111       | 4            |                    | 25           |
| RAD 222       | 3            | On a set Education | 0            |
| RAD 113       | 1            | General Education  |              |
| RAD 114       | 5            | ENG 130            | 3            |
| RAD 121       | 4            | ENG 131            | 3            |
| RAD 123       | 1            | ENG 132            | 3            |
| RAD 124       | 8            | HUM 101            | 3            |
| RAD 131       | 4            | PSY 101            | 3            |
| RAD 134       | 8            | PSY 201            | 3            |
| RAD 141       | 2            | SPH 204            | _3           |
| RAD 201       | 4            |                    | 21           |
| RAD 203       | 8            |                    |              |
| RAD 212       | 8            |                    |              |
| RAD 223       | 8            |                    |              |
| RAD 233       | 10           |                    |              |
| RAD 245       | 1            |                    |              |
| RAD 246       | 2            |                    |              |
| PHY 108       | _4           |                    |              |
|               | 107          |                    |              |

Total hours required for graduation = 153

### SUGGESTED SEQUENCE OF COURSES **RADIOLOGIC TECHNOLOGY -T061**

|          |            |                                   | Hours Per Week |     |          |                 |
|----------|------------|-----------------------------------|----------------|-----|----------|-----------------|
|          |            |                                   | Class          | Lab | Clinical | Credit<br>Hours |
| FIRST Y  | /EAR       |                                   |                |     |          |                 |
| First Qu | ıarter - F | all                               |                |     |          |                 |
| RAD      | 0101       | Positioning I                     | 3              | 2   | 0        | 4               |
| RAD      | 0106       | Clinical I                        | 0              | 0   | 15       | 5               |
| RAD      | 0102       | Principles of Radiographic Tech I | 3              | 2   | 0        | 4               |
| RAD      | 0104       | Radiographic Anatomy              | 4              | 0   | 0        | 4               |
| RAD      | 0110       | Intro to Radiologic Technology    | 1              | 0   | 0        | 1               |
| BIO      | 0107       | Anatomy & Physiology I            | _3             | _2  | _0       | _4              |
|          |            |                                   | 14             | 6   | 15       | 22              |
| Second   | Quarter    | - Winter                          |                |     |          |                 |
| RAD      | 0111       | Positioning II                    | 3              | 2   | 0        | 4               |
| RAD      | 0114       | Clinical II                       | 0              | 0   | 15       | 5               |
| BIO      | 0108       | Anatomy & Physiology II           | 3              | 2   | 0        | 4               |
| RAD      | 0105       | Critique I                        | 1              | 0   | 0        | 1               |
| MAT      | 0121       | College Algebra I                 | 3              | 0   | 0        | 3               |
| PSY      | 0101       | Intro to Psychology               | _3             | 0   | 0        | _3              |
|          |            |                                   | 13             | 4   | 15       | 20              |

|          | uarter - S |                                    |    |    |    |    |
|----------|------------|------------------------------------|----|----|----|----|
| PHY      | 0107       | General Physics                    | 4  | 0  | 0  | 4  |
| MAT      | 0123       | Trigonometry                       | 3  | 0  | 0  | 3  |
| RAD      | 0121       | Positioning III                    | 3  | 2  | 0  | 4  |
| RAD      | 0113       | Critique II                        | 1  | 0  | 0  | 1  |
| RAD      | 0124       | Clinical III                       | _0 | _0 | 24 | 8  |
|          |            |                                    | 11 | 2  | 24 | 20 |
| Fourth ( | Ouarter -  | Summer                             |    |    |    |    |
| PHY      | 0108       | Radiation Physics                  | 3  | 2  | 0  | 4  |
| RAD      | 0103       | Critique III                       | 1  | 0  | 0  | 1  |
| RAD      | 0123       | Clinical IV                        | Ö  | 0  | 24 | 8  |
| RAD      | 0134       | Special Procedures                 | 2  | 0  | 0  | 2  |
|          |            |                                    |    |    |    |    |
| MAT      | 0122       | College Algebra II                 | _3 | _0 | _0 | _3 |
|          |            |                                    | 9  | 2  | 24 | 18 |
| SECON    | D YEAR     |                                    |    |    |    |    |
| Fifth Qu | ıarter - F | all                                |    |    |    |    |
| _ ENG    | 0130       | Grammar & Composition              | 3  | 0  | 0  | 3  |
| RAD      | 0201       | Radiation Protection               | 4  | 0  | 0  | 4  |
| RAD      | 0203       | Clinical V                         | 0  | 0  | 24 | 8  |
| RAD      | 0103       | Processing Technique               | 2  | 2  | 0  | 3  |
| SPH      | 0204       | Fundamentals of Speech             | _3 | _0 | 0  | _3 |
|          |            |                                    | 12 |    | 24 | 21 |
|          |            |                                    | '- | _  |    |    |
|          | uarter - V |                                    |    |    |    |    |
| RAD      | 0131       | Positioning IV                     | 4  | 0  | 0  | 4  |
| ENG      | 0131       | Composition/Intro to Literature    | 3  | 0  | 0  | 3  |
| RAD      | 0212       | Clinical VI                        | 0  | 0  | 24 | 8  |
| CAS      | 0102       | Microcomputer Applications         | _4 | _0 | _0 | _4 |
|          |            |                                    | 11 | 0  | 24 | 19 |
| Seventh  | Quarter    | - Spring                           |    |    |    |    |
| RAD      | 0222       | Principles of Radiographic Tech II | 2  | 2  | 0  | 3  |
| RAD      | 0223       | Clinical VII                       | 0  | 0  | 24 | 8  |
| RAD      | 0245       | Seminar I                          | 1  | Ö  | 0  | 1  |
| ENG      | 0132       | Composition/Research/Document      | 3  | 0  | 0  | 3  |
| HUM      | 0101       | Dimensions of Human Experience     | _3 | _0 | 0  | _3 |
| 710111   | 0101       | Dimensions of Human Expension      | 9  |    | 24 | 18 |
|          |            |                                    | 9  | 2  | 24 | 10 |
| Eighth ( | Quarter -  | Summer                             |    |    |    |    |
| RAD      | 0233       | Clinical VIII                      | 0  | 0  | 30 | 10 |
| RAD      | 0246       | Seminar II                         | 2  | 0  | 0  | 2  |
| PSY      | 0201       | Abnormal Psychology                | _3 | _0 | _0 | _3 |
|          |            |                                    | 5  | 0  | 30 | 15 |
|          |            |                                    |    |    |    |    |

Total credit hours required for graduation = 153

### ASSOCIATE IN APPLIED SCIENCE DEGREE **ACCOUNTING (T016)**

The purpose of the Accounting curriculum is to prepare the individual to enter the accounting profession through study of accounting principles, theories and practices with related study in law, finance, management and data processing operations.

The curriculum is designed to prepare the individual for entry-level accounting positions, such as junior accountant, bookkeeper, accounting clerk, cost clerk, payroll clerk and related data processing occupations.

With experience and additional education, the individual will be able to advance to positions such as systems accountant, cost accountant, budget accountant and property accountant.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- Analyze transactions and end-of-period deferral/accrual situ-1. ations and prepare journal entries.
- Post journal entries to general ledger accounts and subsidiary 2. ledgers in a manual or computerized accounting system.
- Be able to develop and carry through the entire accounting 3. process from transaction through entries, income statement, balance sheet, and cash flows.
- Know generally accepted accounting principles and the con-4. cepts and theories underlying the preparation of financial statements.
- Know the theories and practices of the accounting process for 5. proprietorships, partnerships, and corporations.
- Be able to handle accounting for inventories using the various 6. cost and procedure mechanisms that are applied to this accounting process.
- Know the procedures and processes which are applied to ac-7. counting for equity and debt securities.
- Know the accounting for job order, process and standard cost 8. systems.
- Prepare income tax returns for individuals and businesses. 9.
- Know and apply generally accepted auditing standards and 10. the procedures employed in conducting an audit.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses            | Credit Hours         | Related Courses            | Credit Hours |
|--------------------------|----------------------|----------------------------|--------------|
| ACC 120                  | 6                    | BUS 109                    | 4            |
| ACC 121                  | 6                    | ECO 102                    | 5            |
| ACC 222                  | 6                    | ECO 104                    | 5            |
| ACC 223                  | 6                    | CAS 150                    | 4            |
| ACC 224                  | 6                    | CAS 240                    | 4            |
| ACC 225                  | 3                    |                            |              |
| ACC 269                  | 3                    | *Select three of the follo | owing:       |
| ACC 229                  | 4                    | BUS 115                    | 4            |
| ACC 230                  | 4                    | BUS 116                    | 4            |
| BUS 123                  | 4                    | BUS 101                    | 4            |
| BUS 124                  | 4                    | BUS 219                    | 4            |
| ACC 226                  | 3                    | BUS 235                    | 4            |
| 7.00 220                 | •                    |                            |              |
| Select one of the follow | ving:                | Select one of the follow   | ing:         |
| ACC 227                  | 6                    | MAT 117                    | 4            |
| ACC 291                  | 3                    | MAT 121                    | 3            |
| 7.00 201                 | <del></del><br>58-61 |                            | 37-38        |
|                          | 30-01                |                            |              |
|                          |                      | General Education Co       |              |
|                          |                      | ENG 130                    | 3            |
|                          |                      | ENG 131                    | 3            |
|                          |                      | ENG 132                    | 3            |
|                          |                      | SPH 204                    | 3            |
|                          |                      | HUM 113                    | 4            |
|                          |                      | PSY 101                    | _3           |
|                          |                      |                            | 19           |
|                          |                      | Work Experience/Elect      | tives 0      |
|                          |                      |                            |              |

Total hours required for graduation = 114-118

# SUGGESTED SEQUENCE OF COURSES **ACCOUNTING - T016**

|          |         |                               |       | HOUR | _      |
|----------|---------|-------------------------------|-------|------|--------|
| FIRST Y  | EAD     |                               | CLASS | LAB  | CREDIT |
| Fall Qua |         |                               |       |      |        |
|          | arter   |                               |       |      |        |
| ACC      | 0120    | Accounting I                  | 4     | 4    | 6      |
| BUS      | 0123    | Business Finance I            | 4     | 0    | 4      |
| BUS      | 0109    | Business Math                 | 4     | 0    | 4      |
|          |         | *Elective                     | 4     | _0   | _4     |
|          |         |                               | 16    | 4    | 18     |
| Winter 0 | Quarter |                               |       |      |        |
| ACC      | 0121    | Accounting II                 | 4     | 4    | 6      |
| BUS      | 0124    | Business Finance II           | 4     | 0    | 4      |
| PSY      | 0101    | Introduction to Psychology    | 3     | 0    | 3      |
| ACC      | 0229    | Taxes I                       | 4     | 0    | 4      |
| ENG      | 0130    | English Grammar & Composition | _3    | _0   | _3     |
|          |         |                               | 18    | 4    | 20     |

|            |              |  |        | HOURS | -      |
|------------|--------------|--|--------|-------|--------|
| 0          | O            |  | CLASS  | LAB   | CREDIT |
| Spring (   |              | Accounting III                             | 4      | 4     | 6      |
| ACC<br>ENG | 0222         | Accounting III                             | 4<br>3 | 0     | 6<br>3 |
| ACC        |              | Composition & Intro to Literature Taxes II | 4      | 0     | 4      |
| ECO        | 0230<br>0102 | Economics I                                | 5      | 0     | _5     |
| ECO        | 0102         | Economics                                  |        |       |        |
|            |              |  | 16     | 4     | 18     |
| SECON      |              |  |        |       |        |
| Fall Qua   | arter        |  |        |       |        |
|            |              | *Elective                                  | 4      | 0     | 4      |
| ACC        | 0223         | Intermediate Accounting I                  | 4      | 4     | 6      |
| ACC        | 0225         | Cost Accounting I                          | 2      | 2     | 3      |
| ECO        |              | Economics II                               | 5      | 0     | 5      |
| SPH        | 0204         | Fundamentals of Speech                     | _3     | 0     | 3      |
|            |              |  | 18     | 6     | 21     |
| Winter 0   | Quarter      |  |        |       |        |
| ACC        | 0224         | Intermediate Accounting II                 | 4      | 4     | 6      |
| ACC        | 0226         | Cost Accounting II                         | 2      | 2     | 3      |
| CAS        | 0150         | Integrated Spreadsheets                    | 3      | 2     | 4      |
| ENG        | 0132         | Composition/Research/Document              | 3      | 0     | 3      |
|            |              | *Elective                                  | _4     | 0     | _4     |
|            |              |  | 16     | 8     | 20     |
| Spring (   | Quarter      |  | . •    | •     |        |
| ACC        | 0269         | Auditing                                   | 3      | 0     | 3      |
| CAS        | 0240         | Automated Accounting Systems               | 3      | 2     | 4      |
| HUM        | 0113         | Professional Imaging                       | 4      | 0     | 4      |
| MAT        | 0117         | Intro to Statistics                        | 4      | 0     | 4      |
|            |              | or   |        |       |        |
| MAT        | 0121         | College Algebra I                          | 3      | 0     | 3      |
| ACC        | 0291         | Governmental Accounting                    | 3      | 0     | 3      |
|            |              | or   |        |       |        |
| ACC        | 0227         | Intermediate Accounting III                | _4 _   | 4     | _6     |
|            |              |  | 17     | 6 1   | 8-21   |

Total credit hours required for graduation = 114-118

# ASSOCIATE IN APPLIED SCIENCE DEGREE BUSINESS ADMINISTRATION (T018)

The Business Administration curriculum is designed to prepare an individual for entry into management positions.

The curriculum develops competencies in the application of management principles. Emphasis is placed on skill development in the area of management functions, computer applications and analysis, critical thinking and decision-making techniques, marketing, finance, legal aspects of business, oral and written communications, and the utilization of human resources.

Through the development of management competencies, the graduate will be able to function as a contributing member of a management team.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- Understand how the various statutes, codes and regulations which form today's legal environment affect the operation of business.
- 2. Understand the nature of the economic environment and be able to apply this understanding to the operation of business.
- 3. Acquire a basic understanding of the federal and state tax systems and how they affect the operations of business.
- 4. Develop self-confidence and leadership skills.
- 5. Be able to express concepts and ideas to other people by use of oral and written communications.
- Understand markets and market research and the basic marketing concepts of products, price, promotion and distribution in order to succeed in reaching all consumers with products, services, and ideas.
- Be able to perform basic tasks on the various machines found in a modern office and have a fundamental knowledge of keyboarding.
- Acquire some knowledge of basic accounting procedures to enable the learner to keep records of business operations to satisfy the requirements of tax agencies, and to determine the success or failure of business procedures.
- 9. Understand financial statements and perform other simple analysis of the information.

### COURSE AND HOUR REQUIREMENTS

| Major Courses | Credit Hours | Related Courses        | Credit Hours |
|---------------|--------------|------------------------|--------------|
| BUS 101       | 4            | CAS 150                | 4            |
| BUS 115       | 4            | ACC 120                | 6            |
| BUS 116       | 4            | ACC 121                | 6            |
| ECO 102       | 5            | ACC 222                | 6            |
| ECO 104       | 5            | BUS 123                | 4            |
| BUS 204       | 4            | BUS 124                | 4            |
| BUS 219       | 4            |                        |              |
| ACC 229       | 4            | *Select one of the fo  | _            |
| ACC 230       | 4            | CAS 101                | 4            |
| BUS 233       | 4            | BUS 290                | 4            |
| BUS 235       | 4            | BUS 231                | 3            |
| CAS 240       | 4            | OSC 102                | 3            |
| MKT 239       | 4            | ACC 291                | 3            |
| BUS 109       | 4            |                        |              |
| 200           | 58           | Select one of the foll | owing:       |
|               | 30           | MAT                    |              |
|               |              | MAT 117                | 4            |
|               |              | MAT 121                | _3           |
|               |              |                        | 36-38        |
|               |              | General Education      | Courses      |
|               |              | ENG 130                | 3            |
|               |              | ENG 131                | 3            |
|               |              | ENG 132                | 3            |
|               |              | SPH 204                | 3            |
|               |              | HUM 113                | 4            |
|               |              | PSY 101                | _3           |
|               |              |                        | 19           |
|               |              |                        |              |
|               |              | Work Experience/El     | ective 3     |

Total credit hours required for graduation = 116-118

### SUGGESTED SEQUENCE OF COURSES **BUSINESS ADMINISTRATION - T018**

|         |         |                               | HOURS |     |        |
|---------|---------|-------------------------------|-------|-----|--------|
|         |         |                               | CLASS | LAB | CREDIT |
| FIRST   | YEAR    |                               |       |     |        |
| Fall Qu | uarter  |                               |       |     |        |
| ACC     | 0120    | Accounting I                  | 4     | 4   | 6      |
| BUS     | 0109    | Business Math                 | 4     | 0   | 4      |
| BUS     | 0115    | Business Law I                | 4     | 0   | 4      |
| BUS     | 0101    | Introduction to Business      | _4    | 0   | _4     |
|         |         |                               | 16    | 4   | 18     |
| Winter  | Quarter |                               |       |     |        |
| ACC     | 0121    | Accounting II                 | 4     | 4   | 6      |
| ACC     | 0229    | Taxes I                       | 4     | 0   | 4      |
| BUS     | 0116    | Business Law II               | 4     | 0   | 4      |
| BUS     | 0235    | Business Management           | 4     | 0   | 4      |
| ENG     | 0130    | English Grammar & Composition | _3    | 0   | _3     |
|         |         |                               | 19    | 4   | 21     |

|                |         |                                   |       | HOURS<br>S LAB CREDIT |         |
|----------------|---------|-----------------------------------|-------|-----------------------|---------|
| Spring (       | Quarter |                                   | OLAGO |                       | ONLEDIT |
| ACC            | 0222    | Accounting III                    | 4     | 4                     | 6       |
| ENG            | 0131    | Composition & Intro to Literature | 3     | 0                     | 3       |
| ACC            | 0230    | Taxes II                          | 4     | 0                     | 4       |
| BUS            | 0204    | Business Communications           | 4     | 0                     | 4       |
| CAS            | 0240    | Automated Accounting Systems      | _3    | 2                     | _4      |
|                |         |                                   | 18    | 6                     | 21      |
| SECON          | D YEAR  |                                   | , 0   | Ŭ                     |         |
| Fall Qua       | rter    |                                   |       |                       |         |
| BUS            | 0233    | Human Resources Management        | 4     | 0                     | 4       |
| ENG            | 0132    | Composition/Research/Document     | 3     | 0                     | 3       |
| BUS            | 0123    | Business Finance I                | 4     | 0                     | 4       |
| CAS            | 0150    | Integrated Spreadsheets           | 3     | 2                     | 4       |
| ECO            | 0102    | Economics I                       | 5     | 0                     | 5       |
|                |         |                                   | 19    | 2                     | 20      |
| Winter 0       | Quarter |                                   |       |                       |         |
| PSY            | 0101    | Intro to Psychology               | 3     | 0                     | 3       |
| BUS            | 0219    | Credit Procedures & Problems      | 4     | 0                     | 4       |
| BUS            | 0124    | Business Finance II               | 4     | 0                     | 4       |
| ECO            | 0104    | Economics II                      | 5     | 0                     | 5       |
|                |         | *Elective                         | 4     | 0                     | _4      |
|                |         |                                   | 20    | 0                     | 20      |
| Spring Quarter |         |                                   |       |                       |         |
| SPH            | 0204    | Fundamentals of Speech            | 3     | 0                     | 3       |
| MKT            | 0239    | Marketing                         | 4     | 0                     | 4       |
| HUM            | 0113    | Professional Imaging              | 4     | 0                     | 4       |
| MAT            | 0117    | Intro to Statistics               | 4     | 0                     | 4       |
| MAT            | 0121    | or<br>College Algebra I           | 3     | 0                     | 3       |
| 1417 (1        | 3121    | *Elective                         | 3     | 0                     | 3       |
|                |         | or                                |       | •                     |         |
| COE            | 0101    | Work Experience                   | 0     | 0                     | 2       |
|                |         |                                   | 14-21 | 0 1                   | 6-18    |

Total credit hours required for graduation = 116-118

### ASSOCIATE IN APPLIED SCIENCE DEGREE MICROCOMPUTER SYSTEMS TECHNOLOGY (T192)

The purpose of the Microcomputer Systems Technology curriculum is to prepare graduates for employment with business, industry, and government organizations that use or are planning to use computers to process and manage information.

Using microcomputers or other small computer systems, students will learn to apply a variety of commonly used business applications and systems software; set up microcomputer hardware and install software; develop user training programs and user documentation; evaluate and recommend hardware and software; assist users in resolving hardware and software problems; and develop control and security procedures. Students will also learn the fundamentals of microcomputer networking.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- Understand how a computer works, its capabilities and limi-1. tations.
- Master a skilled knowledge of many current software packages 2. including word processing, spreadsheets, databases, graphics, communications, and automated accounting.
- Be able to provide training and support to people who use 3. microcomputers by using good written and oral communications skills and proven training techniques.
- Be able to productively use a current operating system, such 4. as DOS/WINDOWS, for maintaining files and installing software.
- Understand current microcomputer hardware technology in 5. order to provide installation, replacement, and troubleshoot-
- Understand how the data processing department fits in with 6. the total business environment, providing organizational skills for design and implementation of office systems.
- Be able to work effectively with both management and tech-7. nical personnel in regard to using microcomputers for business systems.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses | Credit Hours | Related Courses     | Credit Hours   |
|---------------|--------------|---------------------|----------------|
| OSC 102       | 3            | BUS 109             | 4              |
| CAS 101*      | 4            | ACC 120             | 6              |
| CAS 102       | 4            | ACC 121             | 6              |
| CAS 120*      | 4            | BUS 204             | 4              |
| CAS 106*      | 4            | MAT 117             | _4             |
| CAS 107       | 4            |                     | 24             |
| CAS 135       | 4            | 0                   |                |
| CAS 231       | 4            | General Education C |                |
| CAS 150*      | 4            | ENG 130             | 3              |
| CAS 151       | 4            | ENG 131             | 3              |
| CAS 212*      | 4            | ENG 103             | 3              |
| CAS 213       | 4            | SPH 204             | 3              |
| CAS 130*      | 4            | HUM 113             | 4              |
| CAS 210*      | 4            | Select three credit | hours from the |
| CAS 270       | - 4          | following prefixes: | nours nom the  |
| CAS 140*      | 4            | POL, PSY, SOC       | 3              |
| CAS 230*      | 4            | 101, 131, 300       |                |
| CAS 240*      | 4            |                     | 19             |
| CAS 260*      | 4            | Work Experience/Ele | ectives 3      |
| CAS 160       | 4            |                     |                |
| BUS 271       | 4            |                     |                |
|               | <del></del>  |                     |                |

Students must take a minimum of 70 credit hours from the major course. Classes denoted by an asterisk (\*) are required.

Total hours required for graduation = 116

# SUGGESTED SEQUENCE OF COURSES MICROCOMPUTER SYSTEMS TECHNOLOGY - T192

|                |      |                                       | HOURS |     |        |
|----------------|------|---------------------------------------|-------|-----|--------|
|                |      |                                       | CLASS | LAB | CREDIT |
| FIRST YEAR     |      |                                       |       |     |        |
| Fall Quarter   |      |                                       |       |     |        |
| CAS            | 0101 | Intro to Computer Technology          | 4     | 0   | 4      |
| OSC            | 0102 | Keyboarding (or Computer Elect)       | 2     | 2   | 3      |
| ENG            | 0130 | English Grammar & Composition         | 3     | 0   | 3      |
| BUS            | 0109 | Business Math                         | 4     | 0   | 4      |
| CAS            | 0102 | Microcomputer Applications (or elect) | _4    | 0   | _4     |
|                |      |                                       | 17    | 2   | 18     |
| Winter Quarter |      |                                       |       |     |        |
| CAS            | 0106 | Word Processing I                     | 3     | 2   | 4      |
| CAS            | 0150 | Integrated Spreadsheets               | 3     | 2   | 4      |
| ENG            | 0131 | Composition & Intro to Literature     | 3     | 0   | 3      |
| ACC            | 0120 | Accounting I                          | _4    | 4   | _6     |
|                |      |                                       | 13    | 8   | 17     |

|             |                |                                  | HOURS<br>CLASS LAB CREDIT |   |    |  |  |
|-------------|----------------|----------------------------------|---------------------------|---|----|--|--|
| Spring C    | Quarter        |                                  |                           |   |    |  |  |
| CAS         | 0120           | Microcomputer Operating Systems  | 3                         | 2 | 4  |  |  |
| CAS         |                | Computer Elective                | 4                         | 0 | 4  |  |  |
| SPH         | 0204           | Fundamentals of Speech           | 3                         | 0 | 3  |  |  |
| ACC         | 0121           | Accounting II                    | 4                         | 4 | 6  |  |  |
|             |                | · ·                              | 14                        | 6 | 17 |  |  |
| Summer      | Quarter        |                                  |                           |   |    |  |  |
| CAS         | 0240           | Automated Accounting Systems     | 3                         | 2 | 4  |  |  |
| CAS         |                | Computer Elective                | _3 _                      | 2 | _4 |  |  |
|             |                |                                  | 6                         | 4 | 8  |  |  |
| SECONE      | YEAR           |                                  |                           |   |    |  |  |
| Fall Qua    | rter           |                                  |                           |   |    |  |  |
| CSC         | 0130           | Microcomputer Graphics           | 3                         | 2 | 4  |  |  |
| CAS         | 0140           | Hardware Maintenance & Install   | 3                         | 2 | 4  |  |  |
| BUS         | 0204           | Business Communications          | 4                         | 0 | 4  |  |  |
| COE         | 0101           | Work Experience or Elective      | 3                         | 0 | 3  |  |  |
| CAS         | 0230           | Data Communications I            | _3                        | 2 | _4 |  |  |
|             |                |                                  | 16                        | 6 | 19 |  |  |
| Winter G    | uarter         |                                  |                           |   |    |  |  |
| CAS         | 0212           | Database Management              | 3                         | 2 | 4  |  |  |
| CAS         |                | Computer Elective                | 4                         | 0 | 4  |  |  |
| HUM         | 0113           | Professional Imaging             | 4                         | 0 | 4  |  |  |
| CAS         |                | Computer Elective                | 4                         | 0 | 4  |  |  |
| ENG         | 103            | Report Writing                   | <u>3</u>                  | 0 | _3 |  |  |
|             |                |                                  | 18                        | 2 | 19 |  |  |
| Spring G    | Spring Quarter |                                  |                           |   |    |  |  |
| CAS         | 0210           | Microcomputer Office Systems     | 4                         | 0 | 4  |  |  |
| CAS         |                | Computer Elective                | 4                         | 0 | 4  |  |  |
| SOC/PSY/POL |                |                                  | 3                         | 0 | 3  |  |  |
|             | Social         |                                  |                           |   |    |  |  |
|             | Science        |                                  |                           |   |    |  |  |
| 040         | Elective       |                                  |                           |   |    |  |  |
| CAS         | 0260           | Microcomputer Training & Support | 4                         | 0 | 4  |  |  |
| MAT         | 0117           | Introduction to Statistics       | _4 _                      | 0 | _4 |  |  |
|             |                |                                  | 19                        | 0 | 19 |  |  |

Total credit hours required for graduation = 116

# ASSOCIATE IN APPLIED SCIENCE TECHNOLOGY DEGREE INDUSTRIAL MANAGEMENT (T049)

The Industrial Management curriculum is designed to provide an individual with the ability to function effectively in supervisory and middle-management positions in industry. This program emphasizes study and application in areas such as business and industrial management, production methods and schedules, inventory control, work analysis, motivation techniques and human relations.

This curriculum is designed to prepare the individual to enter supervisory or middle-management positions, to provide an educational program for upgrading or retraining, and to provide an opportunity for the individual wanting to fulfill professional or general interest needs.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- 1. Read, interpret, comprehend, and assimilate management material.
- 2. Quote and delineate the seven (7) principles of management.
- Understand the critical role of the manager as one who inspires and leads subordinates to achieve common, pre-determined objectives.
- 4. Recognize the responsibility of the manger as to environmental laws and issues affecting his particular industry.
- 5. Understand the role managers **must** play in providing a safe and healthy work environment for **all** employees.
- 6. Understand the basics of the production process and his responsibility therein.
- 7. Continue to develop and improve an effective communication style.
- 8. Recognize the need to promote, nurture, and expand the bond of loyalty between labor and management.
- 9. Understand and appreciate the real meaning of security.

### COURSE AND HOUR REQUIREMENTS

| Major Course | Credit Hours | Related Courses   | Credit Hours |
|--------------|--------------|-------------------|--------------|
| ECO 201      | 4            | BUS 123           | 4            |
| CAS 101      | 4            | MAT 101           | 4            |
| ENV 206      | 4            | MAT 102           | 4            |
| ISC 107      | 4            | MAT 117           | 4            |
| ISC 120      | 4            | ISC 214           | 4            |
| ISC 121      | 4            |                   | 20           |
| BPR 122      | 4            | 0                 | 0            |
| ISC 209      | 4            | General Education |              |
| ISC 211      | 4            | ENG 103           | 3            |
| ISC 213      | 4            | ENG 130           | 3            |
| ISC 218      | 4            | ENG 131           | 3            |
| ISC 220      | 4            | ENG 132           | 3            |
| ISC 224      | 4            | SPH 204           | 3            |
| ISC 243      | 4            | PSY 101           | _3           |
| PHY 107      | _4           |                   | 18           |
|              | 60           | Work Experience/E | Electives 12 |

Total hours required for graduation = 110

# SUGGESTED SEQUENCE OF COURSES INDUSTRIAL MANAGEMENT TECHNOLOGY - T049

|          |           |                                    |       | HOUR | -      |
|----------|-----------|------------------------------------|-------|------|--------|
|          |           |                                    | CLASS | LAB  | CREDIT |
| FIRST Y  |           |                                    |       |      |        |
| Fall Qua | arter     |                                    |       |      |        |
| ENG      | 0130      | English Grammar & Composition      | 3     | 0    | 3      |
| ISC      | 0120      | Principles of Industrial Mangmt I  | 4     | 0    | 4      |
| MAT      | 0101      | Principles of Math                 | 4     | 0    | 4      |
| ENV      | 0205      | Environmental Law                  | _4    | 0    | _4     |
|          |           |                                    | 15    | 0    | 15     |
| Winter ( | Quarter   |                                    |       |      |        |
| ENG      | 0131      | Composition & Intro to Literature  | 3     | 0    | 3      |
| ISC      | 0121      | Principles of Industrial Mangmt II | 4     | 0    | 4      |
| MAT      | 0102      | Introduction to Algebra            | 4     | 0    | 4      |
| ISC      | 0107      | OSHA                               | _4    | 0    | _4     |
|          |           |                                    | 15    | 0    | 15     |
| Spring ( | Quarter   |                                    |       | -    |        |
| ENG      | 0132      | Composition/Research/Document      | 3     | 0    | 3      |
| BPR      | 0122      | Industrial Drawing                 | 4     | 0    | 4      |
| MAT      | 0117      | Introduction to Statistics         | 4     | 0    | 4      |
| CAS      | 0101      | Intro to Computer Technology       | _4    | 0    | _4     |
|          |           |                                    | 15    | 0    | 15     |
| Summe    | r Quarter |                                    |       |      |        |
| ENG      | 0103      | Report Writing                     | 3     | 0    | 3      |
| PHY      | 0107      | General Physics                    | 4     | 0    | 4      |
| PSY      | 0101      | Introduction to Psychology         | 3     | 0    | _3     |
|          |           |                                    | 10    | 0    | 10     |

|          |           |                                | HOURS |     |        |
|----------|-----------|--------------------------------|-------|-----|--------|
|          |           |                                | CLASS | LAB | CREDIT |
| SECON    | D YEAR    |                                |       |     |        |
| Fall Qua | arter     |                                |       |     |        |
| ECO      | 0201      | Labor Economics                | 4     | 0   | 4      |
| ISC      | 0209      | Plant Layout                   | 4     | 0   | 4      |
| BUS      | 0123      | Business Finance I             | _4    | 0   | _4     |
|          |           |                                | 12    | 0   | 12     |
| Winter 0 | Quarter   |                                |       |     |        |
| ISC      | 0213      | Production Planning I          | 4     | 0   | 4      |
| ISC      | 0218      | Plant Security                 | 4     | 0   | 4      |
| SPH      | 0204      | Fundamentals of Speech         | _3    | 0   | _3     |
|          |           |                                | 11    | 0   | 11     |
| Spring ( | Quarter   |                                |       |     |        |
| isc      | 0211      | Work Measurement               | 4     | 0   | 4      |
| ISC      | 0214      | Production Planning II         | 4     | 0   | 4      |
| ISC      | 0224      | Elements of Industrial Hygiene | _4    | 0   | _4     |
|          |           |                                | 12    | 0   | 12     |
| Summer   | r Quarter |                                |       |     |        |
| ISC      | 0220      | Management Problems            | 4     | 0   | 4      |
| ISC      | 0243      | Free Enterprise                | _4    | 0   | _4     |
|          |           |                                | 8     | 0   | 8      |

NOTE: Students are required to complete 12 additional quarter hours of electives - 6 of which may be experiential credit from work.

Total credit hours required for graduation = 110



# ASSOCIATE IN APPLIED SCIENCE DEGREE ADMINISTRATIVE OFFICE TECHNOLOGY (T030)

This curriculum prepare individuals to perform secretarial and administrative support duties in a variety of offices including those offices with computerized, automated functions.

Students in this curriculum study keyboarding and word/information processing to develop skills in the preparation of business correspondence, reports, statistical copy, manuscripts and business forms. Administrative support courses emphasize typical office tasks such as scheduling appointments, composing correspondence and performing reprographic duties. Training is also provided in analyzing and coordinating office duties and systems. Skills and knowledge are taught in the areas of electronic document storage and retrieval and computer software utilization.

Graduates of the program may be employed in offices in private business establishments involved in retailing, marketing, advertising, and manufacturing as well as offices in local, state, and federal government.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- 1. Compose and type business correspondence on electronic typewriters and personal computers to produce mailable (error free) typewritten copy from machine transcription and rough draft material.
- 2. Keyboard, edit, move, format, merge, paginate, and print business correspondence from WordPerfect 5.1 software on personal computers.
- 3. Communicate effectively using both oral and written communications. Employ necessary skills, technical information, and judgment required in assisting an executive. Learn to work independently.
- 4. Demonstrate knowledge of manual record management by filing correspondence by alphabetic, numeric, subject, and geographic filing systems, and exhibiting knowledge of database filing, records storage, transfer, retention, disposal, and filing supplies and equipment.
- Demonstrate positive human relations and the ability to func-5. tion as a responsible member of the work force and society. Understand the implications of personal appearance for succeeding in the business world.

6. Perform essential accounting skills used in the accounting cycle of the executive office.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses | Credit Hours | Related Courses             | <b>Credit Hours</b> |
|---------------|--------------|-----------------------------|---------------------|
| OSC 102       | 3            | CAS 101                     | 4                   |
| OSC 103       | 3            | CAS 135                     | 4                   |
| OSC 104       | 3            | BUS 271                     | 4                   |
| OSC 205       | 3            | CAS 150                     | 4                   |
| OSC 106       | 3            | BUS 231                     | 3                   |
| OSC 107       | 3            | BUS 109                     | 4                   |
| OSC 108       | 3            | CAS 240                     | 4                   |
| OSC 206E      | 3            | BUS 204                     | 4                   |
| OSC 207E      | 3            |                             |                     |
| OSC 208E      | 3            | Select one of the following | ng:                 |
| OSC 211       | 1            | MAT 447                     |                     |
| OSC 214       | 3            | MAT 117                     | 4                   |
| OSC 112       | 3            | MAT 121                     | _3                  |
| CAS 106       | 4            |                             | 34-35               |
| CAS 107       | 4            | General Education Cou       | rses                |
| OSC 201       | 3            | ENG 130                     | 3                   |
| ACC 120       | 6            | ENG 131                     | 3                   |
| ACC 121       | 6            | ENG 132                     | 3                   |
| OSC 210       | _3           | SPH 204                     | 3                   |
|               | 63           | HUM 113                     | 4                   |
|               |              | PSY 101                     | 3                   |
|               |              |                             | 19                  |
|               |              | Work Experience/Elective    | ves 3               |

Total hours required for graduation = 119-120

# SUGGESTED SEQUENCE OF COURSES ADMINISTRATIVE OFFICE TECHNOLOGY - T030

|          |         |                               |       | Hours |        |
|----------|---------|-------------------------------|-------|-------|--------|
|          |         |                               | Class | Lab   | Credit |
| FIRST Y  | /EAR    |                               |       |       |        |
| Fall Qua | arter   |                               |       |       |        |
| OSC      | 0102    | Keyboarding/Typewriting       | 2     | 2     | 3      |
| OSC      | 0106    | Shorthand I                   | 2     | 2     | 3      |
| ENG      | 0130    | English Grammar & Composition | 3     | 0     | 3      |
| OSC      | 0112    | Records Management            | 2     | 2     | 3      |
| BUS      | 0271    | Office Management             | 4     | 0     | 4      |
| BUS      | 0204    | Business Communications       | _4    | 0     | _4     |
|          |         |                               | 17    | 6     | 20     |
| Winter ( | Quarter |                               |       |       |        |
| OSC      | 0103    | Document Formatting           | 2     | 2     | 3      |
| PSY      | 0101    | Introduction to Psychology    | 3     | 0     | 3      |
| OSC      | 0107    | Shorthand II                  | 2     | 2     | 3      |
| ENG      | 0131    | Composition & Intro to Lit    | 3     | 0     | 3      |
| CAS      | 0106    | Word Processing I             | 3     | 2     | 4      |
| BUS      | 0109    | Business Math                 | _4    | 0     | _4     |
|          |         |                               | 17    | 6     | 20     |

| Spring   | Quarter |                                   |       |     |      |
|----------|---------|-----------------------------------|-------|-----|------|
| osc      | 0104    | Document Production/Word Proc     | 2     | 2   | 3    |
| OSC      | 0108    | Shorthand III                     | 2     | 2   | 3    |
| ENG      | 0132    | Composition/Research/Document     | 3     | 0   | 3    |
| OSC      | 0201    | Machine Dictation & Transcription | 2     | 2   | 3    |
| CAS      | 0150    | Integrated Spreadsheets           | 3     | 2   | 4    |
| CAS      | 0107    | Word Processing II                | _3    | _2  | _4   |
|          |         |                                   | 15    | 10  | 20   |
| SECON    | D YEAR  |                                   |       |     |      |
| Fali Qua | arter   |                                   |       |     |      |
| ACC      | 0120    | Accounting I                      | 4     | 4   | 6    |
| BUS      | 0231    | Leadership Development            | 2     | 2   | 3    |
| CAS      | 0101    | Intro to Computer Technology      | 4     | 0   | 4    |
| SPH      | 0204    | Fundamentals of Speech            | 3     | 0   | 3    |
| osc      | 0205    | Adv. Word Processing App. I       | 2     | 2   | 3    |
| osc      | 0206E   | Dictation & Transcription I       | _2    | _2  | _3   |
|          |         |                                   | 17    | 10  | 22   |
| Winter ( | Quarter |                                   |       |     |      |
| ACC      | 0121    | Accounting II                     | 4     | 4   | 6    |
| CAS      | 0135    | Desktop Publishing                | 3     | 2   | 4    |
| HUM      | 0113    | Professional Imaging              | 4     | 0   | 4    |
| OSC      | 0210    | Adv. Word Processing App. II      | 2     | 2   | 3    |
| OSC      | 0207E   | Dictation & Transcription II      | _2    | _2  | _3   |
|          |         |                                   | 15    | 10  | 20   |
| Spring ( | Quarter |                                   |       |     |      |
| COE      | 0101    | Work Experience or                |       |     |      |
|          |         | Elective                          | 3     | 0   | 3    |
| OSC      | 0214    | Administrative Office Procedures  | 2     | 2   | 3    |
| OSC      | 0211    | Office Machines                   | 0     | 2   | 1    |
| MAT      | 0117    | Intro to Statistics or            | 4     | 0   | 4    |
| MAT      | 0121    | College Algebra I                 | 3     | 0   | 3    |
| osc      | 0208E   | Dictation & Transcription III     | 2     | 2   | 3    |
| CAS      | 0240    | Automated Accounting Systems      | _3    | _2  | _4   |
|          |         |                                   | 13/14 | 8 1 | 7/18 |

Total credit hours required for graduation = 119-120

# ASSOCIATE IN APPLIED SCIENCE DEGREE GENERAL OFFICE (T033)

The purposes of the General Office curriculum are to prepare the individual to enter clerical office occupations, provide an educational program for individuals wanting education for upgrading (moving from one position to another) or retraining (moving from present position to a clerical position) and provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through skill development in the areas of keyboarding, records management and automated office equipment. Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in office-related activities.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- Compose and type business correspondence on personal computers or word processing equipment and produce mailable (error free) copy from machine transcription and rough draft material.
- 2. Perform essential secretarial accounting skills used in the accounting cycle of an executive office.
- Demonstrate positive human relations and the ability to function as a responsible member of the work force and society. Understand the implications of personal appearance for succeeding in the business world.
- 4. Produce accurate correspondence by keyboarding, editing, page numbering, creating tabulations, storing and merging from WordPerfect 5.1 software on personal computers.
- 5. Communicate effectively using both oral and written communications. Learn to work independently.
- 6. Demonstrate knowledge of manual record management by filing correspondence by alphabetic, numeric, subject, and geographical filing systems, and exhibiting knowledge of storage records, transferring, and filing supplies and equipment.

### COURSE AND HOUR REQUIREMENTS

| Major Courses | Credit Hours | Related Courses        | Credit Hours |
|---------------|--------------|------------------------|--------------|
| OSC 102       | 3            | BUS 109                | 4            |
| OSC 103       | 3            | BUS 204                | 4            |
| OSC 104       | 3            | CAS 240                | 4            |
| OSC 205       | 3            | CAS 101                | 4            |
| OSC 210       | 3            | BUS 231                | 3            |
| OSC 112       | 3            | CAS 135                | 4            |
| OSC 201       | 3            | CAS 102                | 4            |
| OSC 214       | 3            | BUS 101                | 4            |
| OSC 211       | 1            |                        |              |
| CAS 106       | 4            | Select one of the foll | lowing:      |
| CAS 107       | 4            | MAT 117                | 4            |
| BUS 271       | 4            | MAT 117<br>MAT 121     | 4            |
| ACC 120       | 6            | WAT 121                | _3           |
| ACC 121       | 6            |                        | 34-35        |
| CAS 150       | _4           | General Education      | Courses      |
|               | 53           | ENG 130                | 3            |
|               |              | ENG 131                | 3            |
|               |              | ENG 132                | 3            |
|               |              | SPH 204                | 3            |
|               |              | HUM 113                | 4            |
|               |              | PSY 101                | 3            |
|               |              |                        | 19           |
|               |              |                        |              |
|               |              | Work Experience/Ei     | lectives 3   |

Total hours required for graduation = 109-110

## SUGGESTED SEQUENCE OF COURSES **GENERAL OFFICE - T033**

|  |       | HOURS |        |  |
|--|-------|-------|--------|--|
|  | CLASS | LAB   | CREDIT |  |
| FIRST YEAR                             |       |       |        |  |
| Fail Quarter                           |       |       |        |  |
| OSC 0102 Keyboarding/Typewriting       | 2     | 2     | 3      |  |
| BUS 0101 Introduction to Business      | 4     | 0     | 4      |  |
| ENG 0130 English Grammar & Composition | 3     | 0     | 3      |  |
| OSC 0112 Records Management            | 2     | 2     | 3      |  |
| CAS 0101 Intro to Computer Technology  | 4     | 0     | 4      |  |
| BUS 0204 Business Communications       | _4    | 0     | 4      |  |
|  | 19    | 4     | 21     |  |
| Winter Quarter                         |       | •     |        |  |
| OSC 0103 Document Formatting           | 2     | 2     | 3      |  |
| PSY 0101 Introduction to Psychology    | 3     | 0     | 3      |  |
| CAS 0150 Integrated Spreadsheets       | 3     | 2     | 4      |  |
| ENG 0131 Composition & Intro to Lit    | 3     | 0     | 3      |  |
| CAS 0106 Word Processing I             | 3     | 2     | 4      |  |
| BUS 0109 Business Math                 | 4     | 0     | 4      |  |
|  |       |       |        |  |

|          |         |                                   |       | HOUR  | _        |
|----------|---------|-----------------------------------|-------|-------|----------|
| Coulon   | Ounday  |                                   | CLASS | LAB   | CREDIT   |
| Spring   |         | Deciment Decimentary Mand Deci    | 0     | _     | _        |
| OSC      | 0104    | Document Production/Word Proc     | 2     | 2     | 3        |
| CAS      | 0102    | Microcomputer Applications        | 4     | 0     | 4        |
| ENG      | 0132    | Composition/Research/Document     | 3     | 0     | 3        |
| osc      | 0201    | Machine Dictation & Transcription | 2     | 2     | 3        |
| SPH      | 0204    | Fundamentals of Speech            | 3     | 0     | 3        |
| CAS      | 0107    | Word Processing II                | _3    | _2    | _4       |
|          |         |                                   | 17    | 6     | 20       |
| SECON    | D YEAR  |                                   |       |       |          |
| Fall Qua | arter   |                                   |       |       |          |
| ACC      | 0120    | Accounting I                      | 4     | 4     | 6        |
| BUS      | 0271    | Office Management                 | 4     | 0     | 4        |
| CSC      | 0135    | Desktop Pub.                      | 3     | 2     | 4        |
| OSC      | 0205    | Adv. Word Processing App. I       | _2    | 2     | _3       |
|          |         | 3 · 4·                            | 13    | <br>8 | 17       |
| Minter   | O       |                                   | 13    | 8     | 17       |
| Winter   |         | Made Employee                     |       | _     | •        |
| COE      | 0101    | Work Experience or                | 3     | 0     | 3        |
|          |         | Elective                          |       |       |          |
| ACC      | 0121    | Accounting II                     | 4     | 4     | 6        |
| BUS      | 0231    | Leadership Development            | 2     | 2     | 3        |
| osc      | 0210    | Adv. Word Processing App. II      | _2    | _2    | _3       |
|          |         |                                   | 11    | 8     | 15       |
| Spring   | Quarter |                                   |       |       |          |
| OSC      | 0214    | Administrative Office Procedures  | 2     | 2     | 3        |
| OSC      | 0211    | Office Machines                   | 0     | 2     | 1        |
| HUM      | 0113    | Professional Imaging              | 4     | 0     | 4        |
| MAT      | 0117    | Intro to Statistics or            | 4     | 0     | 4        |
| MAT      | 0121    | College Algebra I                 | 3     | 0     | 3        |
| CAS      | 0240    | Automated Accounting Systems      | 3     | 2     | 4        |
|          |         |                                   | 12-13 |       | <br>5-16 |

Total credit hours required for graduation = 109-110

## ASSOCIATE IN APPLIED SCIENCE DEGREE MEDICAL OFFICE TECHNOLOGY (T032)

This curriculum prepares the individuals to enter the medical secretarial profession. The medical secretary performs secretarial duties utilizing the knowledge of medical terminology and medical office and/ or laboratory procedures.

Skills are taught in processing medical documents using computerized functions and/or manual functions. Compiling and recording medical charts, reports, case histories, and correspondence using the electronic typewriter or automated office equipment, scheduling appointments, and preparing and sending bills to patients are duties that are performed in the medical office and are taught in this curriculum.

Graduates of the curriculum may find employment opportunities with medical supply and equipment manufacturers, medical laboratories, the office of physicians, hospitals, and other medical care providers.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- Type business correspondence and produce accurate medi-1. cal reports and forms on electronic typewriters and personal computers from shorthand notes and transcription machines.
- Produce accurate medical reports and correspondence by 2. keyboarding, editing, paginating, creating tabulations, storing paragraphs and executing mail merges from WordPerfect 5.1 software on personal computers.
- Communicate effectively using both oral and written commu-3. nications. Employ necessary skills, technical information, and judgment required in assisting a physician. Learn to work independently.
- Demonstrate knowledge of manual record management by 4. filing correspondence by alphabetic, numeric, subject, and geographic filing systems, and exhibiting knowledge of database filing, records storage, transfer, retention, disposal, filing supplies, and equipment.
- Demonstrate positive human relations, and function as a re-5. sponsible member of the work force and society. Understand the implications of personal appearance for succeeding in the business world.
- Perform essential accounting skills used in the accounting 6. cycle of a medical office.
- Produce accurate health code books, and follow up on delin-7. quent accounts.

### **COURSE AND HOUR REQUIREMENTS**

| Major Courses | Credit Hours | Related Courses            | Credit Hours |
|---------------|--------------|----------------------------|--------------|
| OSC 102       | 3            | BUS 109                    | 4            |
| OSC 103       | 3            | ACC 120                    | 6            |
| OSC 104       | 3            | ACC 121                    | 6            |
| OSC 205       | 3            | CAS 150                    | 4            |
| OSC 106       | 3            | OSC 248                    | 3            |
| OSC 107       | 3            | BIO 107                    | 4            |
| OSC 108       | 3            | BIO 108                    | 4            |
| OSC 206E      | 3            | CAS 240                    | 4            |
| BUS 271       | 4            |                            |              |
| OSC 183M      | 4            | Select one of the followin | g:           |
| OSC 284M      | 4            | MAT 447                    |              |
| OSC 202M      | 3            | MAT 117                    | 4            |
| OSC 203M      | 3            | MAT 121                    | _3           |
| OSC 216       | 3            |                            | 38-39        |
| OSC 112       | 3            | General Education Cour     | ses          |
| OSC 211       | 1            | ENG 130                    | 3            |
| BUS 204       | 4            | ENG 131                    | 3            |
| CAS 106       | 4            | ENG 132                    | 3            |
| CAS 107       | 4            | SPH 204                    | 3            |
|               | 61           | HUM 113                    | 4            |
|               |              | PSY 101                    | _3           |
|               |              |                            | 19           |
|               |              | Work Experience/Electiv    | <b>'es</b> 0 |

Total hours required for graduation = 118-119

# SUGGESTED SEQUENCE OF COURSES MEDICAL OFFICE TECHNOLOGY - T032

|          |         |  |       | HOUR | -      |
|----------|---------|--|-------|------|--------|
| FIRST Y  | EAD     |  | CLASS | LAB  | CREDIT |
| Fall Qua |         |  |       |      |        |
| OSC      | 0183M   | Medical Term. & Vocabulary I   | 4     | 0    | 4      |
| OSC      | 0106    | Shorthand I  | 2     | 2    | 3      |
| BUS      | 0204    | Business Communications  | 4     | 0    | 4      |
| osc      | 0102    | Keyboarding/Typewriting  | 2     | 2    | 3      |
| ENG      | 0130    | English Grammar & Composition  | 3     | 0    | 3      |
| osc      | 0112    | Records Management   | _2    | 2    | 3      |
|          |         | , and the second | 17    | 6    | 20     |
| Winter C | Juartor |  | 17    | 0    | 20     |
| OSC      | 0284M   | Madical Tarm 9 Vacabulant II   | 4     | 0    | 4      |
|          |         | Medical Term. & Vocabulary II  | 4     | 0    | 4      |
| ENG      | 0131    | Composition & Intro to Literature  | 3     | 0    | 3      |
| osc      | 0103    | Document Formatting  | 2     | 2    | 3      |
| osc      | 0107    | Shorthand II   | 2     | 2    | 3      |
| BIO      | 0107    | Anatomy & Physiology I   | 3     | 2    | 4      |
| CAS      | 0106    | Word Processing I  | 3     | 2    | 4      |
| PSY      | 0101    | Introduction to Psychology   | 3     | 0    | 3      |
|          |         |  | 20    | 8    | 24     |

|          |         |                                   |       | HOUR | -      |
|----------|---------|-----------------------------------|-------|------|--------|
| Carina ( | Quarter |                                   | CLASS | LAB  | CREDIT |
| Spring ( | 0104    | Document Prod/Word Processing     | 2     | 2    | 3      |
| ENG      | 0104    | Composition/Research/Document     | 3     | 0    | 3      |
| OSC      | 0102    | Shorthand III                     | 2     | 2    | 3      |
| BIO      | 0108    | Anatomy & Physiology II           | 3     | 2    | 4      |
| CAS      | 0107    | Word Processing II                | _3    | 2    | 4      |
|          |         | <b>3</b>                          | 13    | 8    | 17     |
| SECON    | D YEAR  |                                   | 13    | 0    | 17     |
| Fall Qua |         |                                   |       |      |        |
| OSC      | 0202M   | Medical Dict/Transcription I      | 2     | 2    | 3      |
| OSC      | 0205    | Adv Word Processing Application I | 2     | 2    | 3      |
| ACC      | 0120    | Accounting I                      | 4     | 4    | 6      |
| OSC      | 0206E   | Dictation & Transcription I       | 2     | 2    | 3      |
| BUS      | 0109    | Business Math                     | 4     | 0    | 4      |
|          |         |                                   | 14    | 10   | 19     |
| Winter 0 | Quarter |                                   |       |      |        |
| CAS      | 0150    | Integrated Spreadsheets           | 3     | 2    | 4      |
| OSC      | 0203M   | Medical Dictation II              | 2     | 2    | 3      |
| OSC      | 0216    | Medical Secretarial Procedures    | 2     | 2    | 3      |
| ACC      | 0121    | Accounting II                     | 4     | 4    | 6      |
| osc      | 0211    | Office Machines                   | 0     | 2    | 1      |
| HUM      | 0113    | Professional Imaging              | 4     | 0    | 4      |
|          |         |                                   | 15    | 12   | 21     |
| Spring ( | Quarter |                                   |       |      |        |
| OSC      | 0248    | Medical Insurance                 | 2     | 2    | 3      |
| BUS      | 0271    | Office Management                 | 4     | 0    | 4      |
| CAS      | 0240    | Automated Accounting Systems      | 3     | 2    | 4      |
| MAT      | 0117    | Intro to Statistics or            | 4     | 0    | 4      |
| MAT      | 0121    | College Algebra I                 | 3     | 0    | 3      |
| SPH      | 0204    | Fundamentals of Speech            | 3     | 0    | _3     |
|          |         |                                   | 15-16 | 4 1  | 7-18   |

Total credit hours required for graduation = 118-119

# ASSOCIATE IN APPLIED SCIENCE DEGREE FASHION MERCHANDISING AND MARKETING (T143)

The Fashion Merchandising and Marketing curriculum is designed to provide individuals with fundamental and transferable skills in fashion merchandising and marketing activities. The individual will become familiar with various areas and the components that make the fashion industry and study the principals that apply to marketing. Emphasis will be placed on merchandising technique, visual merchandising, marketing, buying, selling, human resource management, stock planning and pricing special events, promotional activities, and textiles.

Employment opportunities as assistant buyers, fashion coordinator, fashion stylist, display specialist, merchandise and store managers or owners exist within department store and specialty shops. Other areas of employment are the wholesale and manufacturing industry, buying offices, advertising agencies, special events coordinators and human resource management.

In the process of successfully completing this program of study, the student will have demonstrated the ability to:

- 1. Coordinate a line of garments, calculate the construction cost and the promotional needs.
- 2. Know generally the principles and concepts and the theories involved in consumer behavior and fashion merchandising.
- Generate a promotional plan for a budget, business, or season.
- Analyze and forecast trends, using knowledge of the history of fashion.
- 5. Prepare a six-month buying plan that corresponds to the past records and projected profit and promotional needs.
- Organize and produce special events in a logical, well planned manner.

### COURSE AND HOUR REQUIREMENTS

| Major Courses | Credit Hours | Related Courses   | Credit Hours |
|---------------|--------------|-------------------|--------------|
| MKT 249       | 4            | ART 101           | 3            |
| MKT 250       | 4            | MKT 221           | 4            |
| MKT 260       | 4            | OSC 102           | 3            |
| MKT 101       | 4            | BUS 233           | 4            |
| MKT 102       | 3            | MKT 245           | 4            |
| MKT 103       | 4            | ECO 102           | 5            |
| MKT 104       | 2            | HUM 110           | 4            |
| MKT 106       | 4            | CAS 101           | 4            |
| MKT 208       | 4            | MKT 222           | 4            |
| MKT 209       | 4            | MAT 117           | _ 4          |
| MKT 210       | 4            |                   | 39           |
| MKT 211       | 4            | 0                 | 0            |
| MKT 212       | 4            | General Education |              |
| HUM 113       | 4            | ENG 130           | 3            |
|               | 53           | ENG 131           | 3            |
|               | 55           | ENG 132           | 3            |
|               |              | SPH 204           | 3            |
|               |              | REL 101           | 3            |
|               |              | SOC 101           | 3            |
|               |              |                   | 18           |
|               |              | Work Experience/E | Electives 6  |

Total hours required for graduation = 116

# SUGGESTED SEQUENCE OF COURSES **FASHION MERCHANDISING & MARKETING - T143**

|          |         |                                 | HOURS |     |        |
|----------|---------|---------------------------------|-------|-----|--------|
| FIDOT    | EAD     |                                 | CLASS | LAB | CREDIT |
| FIRST Y  |         |                                 |       |     |        |
| Fall Qua |         | 5                               |       | _   |        |
| MKT      | 0101    | Princ of Fashion Merchandising  | 4     | 0   | 4      |
| MKT      | 0102    | Modeling and Social Usage       | 2     | 2   | 3      |
| MKT      | 0104    | Fashion Sketching               | 2     | 0   | 2      |
| ENG      | 0130    | English Grammar & Composition   | 3     | 0   | 3      |
| SOC      | 0101    | Introduction to Sociology       | _3    | 0   | _3     |
|          |         |                                 | 14    | 2   | 15     |
| Winter ( | Quarter |                                 |       |     |        |
| HUM      | 0113    | Professional Imaging            | 4     | 0   | 4      |
| HUM      | 0110    | History of Dress                | 4     | 0   | 4      |
| MKT      | 0103    | Fashion Accessories             | 4     | 0   | 4      |
| MAT      | 0117    | Intro to Statistics             | 4     | 0   | 4      |
| ART      | 0101    | Art Appreciation                | _3    | 0   | _3     |
|          |         |                                 | 19    | 0   | 19     |
| Spring ( | Quarter |                                 |       |     |        |
| MKT      | 0106    | Fabric Science                  | 4     | 0   | 4      |
| MKT      | 0222    | Bridal Consulting               | 4     | 0   | 4      |
| MKT      | 0221    | Menswear                        | 4     | 0   | 4      |
| ENG      | 0131    | Composition/Intro to Literature | 3     | 0   | 3      |
| SPH      | 0204    | Fundamentals of Speech          | 3     | 0   | 3      |
| osc      | 0102    | Keyboarding/Typewriting         | _2    | 2   | _3     |
|          |         |                                 | 20    | 2   | 21     |

|          |         |                                   |       | 3   |        |
|----------|---------|-----------------------------------|-------|-----|--------|
| 05001    | DVEAD   |                                   | CLASS | LAB | CREDIT |
|          | D YEAR  |                                   |       |     |        |
| Fall Qua |         |                                   |       |     |        |
| MKT      | 0210    | Fashion Advertising & Sales Promo | 4     | 0   | 4      |
| MKT      | 0211    | Intro to Apparel Design           | 4     | 0   | 4      |
| MKT      | 0249    | Intro to Fashion Buying/Merch     | 4     | 0   | 4      |
| REL      | 0101    | Major World Religions             | 3     | 0   | 3      |
| ENG      | 0132    | Composition/Research/Document     | _3    | 0   | _3     |
|          |         |                                   | 18    | 0   | 18     |
| Winter ( | Quarter |                                   |       |     |        |
| MKT      | 0250    | Advanced Buying                   | 4     | 0   | 4      |
| MKT      | 0260    | Visual Merchandising              | 4     | 0   | 4      |
| MKT      | 0245    | Retailing                         | 4     | 0   | 4      |
| CAS      | 0101    | Intro to Computer Technology      | 4     | 0   | 4      |
| ECO      | 0102    | Economics !                       | 5     | 0   | 5      |
|          |         |                                   | 21    | 0   | 21     |
| Spring   | Quarter |                                   |       |     |        |
| MKT      | 0208    | Fashion Salesmanship              | 4     | 0   | 4      |
| MKT      | 0209    | Fashion Writing & Communications  | 4     | 0   | 4      |
| MKT      | 0212    | Psychology of Dress               | 4     | 0   | 4      |
| BUS      | 0233    | Human Resources Management        | 4     | 0   | 4      |
| MKT      | 0239    | Marketing/Elective                | 4     | 0   | 4      |
|          |         | Elective                          | _2    | 0   | _2     |
|          |         |                                   | 22    | 0   | 22     |

# REAL ESTATE (Technical Specialty) (T166)

The purpose of the Real Estate (Technical Specialty) curriculum is to provide the prelicensing education requirements needed for real estate salespersons and brokers.

The courses required by the North Carolina Real Estate Commission for prelicensing which are covered in this curriculum are Fundamentals of Real Estate, Real Estate Law, Real Estate Finance, and Brokerage Operations. In addition to these courses, Real Estate Math is also included.

After successful completion of Fundamentals of Real Estate, an individual may make application with the Real Estate Commission to take the prelicensing real estate salesperson examination. After successful completion of all the courses required by the Real Estate Commission, an individual may make application with the Commission to take the real estate prelicensing broker examination.

Employment opportunities are available in real estate firms as salespersons or brokers as well as a real estate broker in one's own business.

Upon completion of this course a student will have obtained the hours of education required by the North Carolina Real Estate Commission to sit for the Real Estate Salesmen Licensing Examination. Along with obtaining the education hours required, an individual must possess a working knowledge of the following:

- "Property Ownership and Interest", transfer of title, land use 1. controls, landlord and tenant law, federal income taxation of homeownership, and property management.
- Real estate brokerage law and practices such as law of 2. agency, fair housing, basic contract law, closing statements, property management.
- 3. License Law, Real Estate Commission rules and trust account guidelines.
- How to obtain financing for a buyer and be able to define types 4. of financing, sources of financing and qualify buyers as to the type financing needed to purchase a particular property.
- Value a house or property according to basic value concepts. 5.
- Learn to use real estate mathematics such as: finance calcu-6. lations, appraisal calculations, closing statement prorations and problems; miscellaneous calculations such as: commissions, estimating sale price to net seller a designated amount, profit/loss area, revenue stamps, income tax, real estate tax.

### COURSE AND HOUR REQUIREMENTS

| Major Courses | Credit Hours | Related Courses  | Credit Hours |
|---------------|--------------|------------------|--------------|
| RLS 162       | 6            | BUS 109          | _4           |
| RLS 164       | 3            |                  | 4            |
| RLS 209       | 3            | Morte Eugenienes | Fleetiuse 0  |
| RLS 234       | _3           | Work Experience/ | Electives 0  |
|               | 15           |                  |              |

Total hours required for graduation = 19

# ASSOCIATE IN APPLIED SCIENCE DEGREE **ELECTRONICS ENGINEERING** TECHNOLOGY (T045)

The Electronics curriculum provides a basic background in electronic related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftpersons.

The electronics technician will start in one or more of the following areas: research, development, production, maintenance or sales. The graduate may begin as an electronics technician, and engineering aide, laboratory technician, supervisor or equipment specialist.

Upon successful completion the student will demonstrate the ability to:

- Design and build circuits that include semiconductor devices. 1. Zener diodes, transistors, SCRs, and Triacs.
- Use basic test equipment and measuring instruments. 2.
- Design, build, and analyze circuits with operational amps, mi-3. croprocessor chips, RAM, and PROM.
- Use a personal computer to solve problems relating to circuit 4. layout, design, and analysis.
- Perform basic electronic experiments and present the results 5. in an accurate, well-written technical report.

#### COURSE AND HOUR REQUIREMENTS

| Major Courses          | Credit Hours | Related Courses C         | redit Hours |
|------------------------|--------------|---------------------------|-------------|
| ELN 112                | 4            | CAS 140                   | 4           |
| ELN 113                | 4            | MAT 102                   | 4           |
| ELN 114                | 4            | MAT 121                   | 3           |
| ELC 115                | 4            | MAT 122                   | 3           |
| ELN 103                | 4            | MAT 123                   | 3           |
| ELN 121                | 4            | PHY 201                   | 4           |
| ELN 122                | 4            | PHY 202                   | 4           |
| ELN 123                | 4            | PHY 203                   | 4           |
| ELN 208                | 4            | CAS 102                   | 4           |
| ELN 218                | 4            |                           | 33          |
| ELN 219                | 4            | 0151                      |             |
| ELN 235                | 4            | General Education Course  | -           |
| ELN 242                | 4            | ART 101                   | 3           |
| ELN 243                | 4            | ENG 130                   | 3           |
| ELN 249                | 4            | ENG 131                   | 3           |
| ELN 246                | 4            | ENG 132                   | 3           |
| ELN 251                | 4            | SPH 204                   | 3           |
| ELN 252 (optional-elec |              | PSY 101                   | _3          |
|                        | 68           |                           | 18          |
|                        | 00           | Work Experience/Flooring  |             |
|                        |              | Work Experiences/Elective | es 4        |
|                        |              |                           |             |

Total hours required for graduation = 123

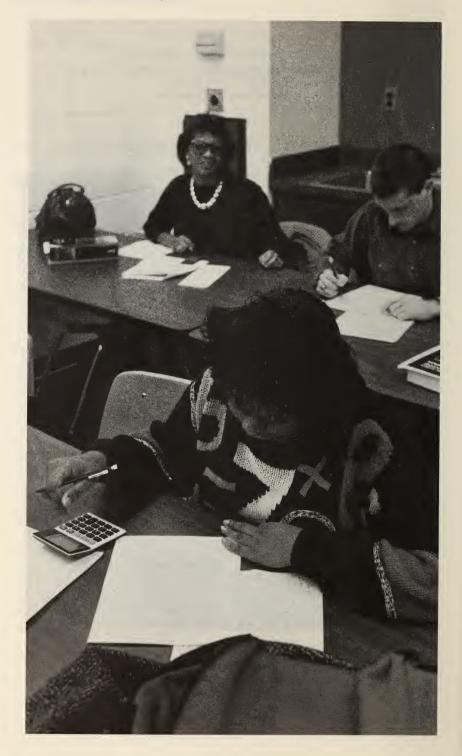
# SUGGESTED SEQUENCE OF COURSES ELECTRONICS ENGINEERING TECHNOLOGY - T045

|          |         |                                 | HOURS |     |        |
|----------|---------|---------------------------------|-------|-----|--------|
|          |         |                                 | CLASS | LAB | CREDIT |
| FIRST Y  |         |                                 |       |     |        |
| Fall Qua |         |                                 |       |     |        |
| ELN      | 0112    | Electronic Fundamentals I       | 3     | 2   | 4      |
| ELN      | 0218    | Logic Fundamentals              | 3     | 2   | 4      |
| MAT      | 0102    | Introduction to Algebra         | 4     | 0   | 4      |
| ENG      | 0130    | English Grammar & Composition   | _3    | _0  | _3     |
|          |         |                                 | 13    | 4   | 16     |
| Winter C | Juarter |                                 |       | •   |        |
| ELN      | 0113    | Electronics Fundamentals II     | 3     | 2   | 4      |
| ELN      | 0219    | Pulse & Logic Circuits          | 3     | 2   | 4      |
| MAT      | 0121    | College Algebra I               | 3     | 0   | 3      |
| ENG      | 0131    | Composition/Intro to Literature | 3     | 0   | 3      |
| CAS      | 0102    | Microcomputer Applications      | 4     | 0   | 4      |
| CAS      | 0102    | Microcomputer Applications      |       |     |        |
|          |         |                                 | 16    | 4   | 18     |
| Spring ( | Quarter |                                 |       |     |        |
| ELN      | 0114    | Active Devices                  | 3     | 2   | 4      |
| ELN      | 0123    | Introduction to Microprocessors | 3     | 2   | 4      |
| MAT      | 0123    | Trigonometry                    | 3     | 0   | 3      |
| ENG      | 0132    | Composition/Research/Document   | _3    | 0   | _3     |
|          |         |                                 | 12    | 4   | 14     |
| Summa    | Quarter |                                 | 12    | 7   | 14     |
| ELN      | 0242    | Electronic Systems I            | 3     | 2   | 4      |
| ELN      | 0121    | Electronic Gysterns I           | 3     | 2   | 4      |
| MAT      | 0121    |                                 | 3     |     |        |
| IVIAI    | 0122    | College Algebra II              |       | _0  | _3     |
|          |         |                                 | 9     | 4   | 11     |
| SECONI   | ) YEAR  |                                 |       |     |        |
| Fall Qua |         |                                 |       |     |        |
| ELN      | 0122    | Electronic Circuits II          | 3     | 2   | 4      |
| ELN      | 0243    | Electronic Systems II           | 3     | 2   | 4      |
| PHY      | 0201    | Physics I                       | 3     | 2   | 4      |
| PSY      | 0101    | Introduction to Psychology      | _3 .  | 0   | _3     |
|          |         |                                 | 12    | 6   | 15     |
| Winter C | Juarter |                                 |       | Ŭ   |        |
| ELN      | 0103    | Circuit Layout and Design       | 3     | 2   | 4      |
| ELN      | 0208    | Industrial Electronics          | 3     | 2   | 4      |
| PHY      | 0202    | Physics II                      | 3     | 2   | 4      |
| ART      | 0101    | Art Appreciation                | 3     | 0   | 3      |
| ELC      | 0115    | Rotary Machines and Control     | 3     | 2   | 4      |
| LLO      | 0113    | Hotaly Macrilles and Control    |       |     |        |
|          |         |                                 | 15    | 8   | 19     |
| Spring ( |         |                                 |       |     |        |
| ELN      | 0235    | Industrial Instrumentation      | 3     | 2   | 4      |
| ELN      | 0251    | Intr to PLCs                    | 3     | 2   | 4      |
| PHY      | 0203    | Physics III                     | 3     | 2   | 4      |
| SPH      | 0204    | Fundamentals of Speech          | _3    | 0   | _3     |
|          |         |                                 | 12    | 6   | 15     |
|          |         |                                 |       |     |        |

|       |           |                                       | HOURS |     |        |
|-------|-----------|---------------------------------------|-------|-----|--------|
|       |           |                                       | CLASS | LAB | CREDIT |
| Summe | r Quarter |                                       |       |     |        |
| ELN   | 0246      | Electronic Systems Project            | 3     | 2   | 4      |
| ELN   | 0249      | Elect Technique & Problem Solving     | 3     | 2   | 4      |
| CAS   | 0140      | Hardware Maintenance and Installation | 3     | 2   | 4      |
|       |           | Elective                              | _4    | 0   | _4     |
|       |           |                                       | 13    | 6   | 16     |

Total credit hours required for graduation = 123





# **DIPLOMA CREDIT PROGRAMS**



### **VOCATIONAL DIPLOMAS**

### AIR CONDITIONING, HEATING, AND REFRIGERATION (V024)

The Air Conditioning, Heating and Refrigeration curriculum is designed to teach knowledge and skills necessary for servicing and installing residential and light commercial climate control equipment. Instruction will include heating and cooling theory, applied electricity and electronics, and the operating principles for a wide-range of heating and cooling equipment. The diploma program will emphasize startup and service skills for oil, gas and electric furnaces, air-cooled air conditioning and air-to-air heat pumps.

Advanced diploma level programs will provide for more in-depth study and experience and will also include service and installation of water-cooled air conditioners, water source heat pumps, variable speed heat pumps, conventional hydronic systems and residential and light commercial system design.

Upon successful completion of the program, the student will demonstrate the ability to:

- 1. Service/install a room heating and cooling unit according to manufacturer's specifications.
- 2. Service/install residential and light commercial air conditioning equipment.
- 3. Service/install residential and light heat pumps.
- 4. Design/install residential and light commercial air distribution systems.
- 5. Balance air distribution system for heating and cooling.
- 6. Troubleshoot and repair controls.
- 7. Evacuate and charge refrigeration and cooling systems.
- 8. Use all tools and equipment necessary to make repairs on cooling and heating equipment.

# COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |      |  |       | Hours |        |
|-----------|------|--|-------|-------|--------|
| Fall Quar | rter | Title                                    | Class | Shop  | Credit |
| AHR       | 1121 | Principles of Refrigeration              | 2     | 6     | 4      |
| DFT       | 110  | Introduction to Drafting                 | 4     | 0     | 4      |
| ELC       | 1102 | Basic Electricity for Air                | 2     | 6     | 4      |
|           |      | Conditioning, Heating, and Refrigeration |       |       |        |
| MAT       | 1101 | Vocational Basic Arithmetic              | 4     | 0     | 4      |
| WLD       | 1101 | Basic Gas Welding                        | 1     | 3     | _2     |
|           |      |  | 13    | 15    | 18     |

|          |         |   |       | Hours |        |
|----------|---------|---|-------|-------|--------|
|          |         |   | Class | Lab   | Credit |
| Winter Q | uarter  |   |       |       |        |
| AHR      | 1115    | Fundamentals of Heating                   | 2     | 6     | 4      |
| PHY      | 1101    | Applied Physics                           | 4     | 0     | 4      |
| AHR      | 1123    | Principles of Air Conditioning I          | 2     | 6     | 4      |
| BPR      | 1116    | Blueprint Reading: Air Conditioning       | 4     | 0     | 4      |
| ISC      | 1101    | General Industrial Survey                 | 4     | 0     | 4      |
|          |         |   | 16    | 12    | 20     |
| Spring Q | uarter  |   |       |       |        |
| AHR      | 1128    | Automatic Controls                        | 2     | 6     | 4      |
| ENG      | 1102    | Communication Skills                      | 4     | 0     | 4      |
| AHR      | 1126    | All Year Comfort Systems                  | 2     | 6     | 4      |
| PSY      | 1101    | Human Relations                           | _4    | _0    | _4     |
|          |         |   | 12    | 12    | 16     |
| Summer   | Quarter |   |       |       |        |
| AHR      | 1122    | Domestic and Commercial Refrigeration     | 2     | 6     | 4      |
| AHR      | 1131    | State AC, Heat, Refrigeration License Law | 4     | 0     | 4      |
| AHR      | 1124    | Air Condition and Refrigeration Servicing | 2     | 6     | 4      |
| AHR      | 1130    | Year Around Duct System Design            | 4     | _0    | _4     |
|          |         |   | 12    | 12    | 16     |

Total hours required for graduation = 70

# NIGHT SEQUENCE

|          |         | MIGHT SEGULIACE                          |       |       |        |
|----------|---------|--|-------|-------|--------|
| FIRST Y  |         |  |       | Hours |        |
| Fall Qua | rter    | Title                                    | Class | Shop  | Credit |
| AHR      | 1121    | Principles of Refrigeration              | 2     | 6     | 4      |
| DFT      | 110     | Introduction to Drafting                 | 4     | 0     | 4      |
| MAT      | 1101    | Vocational Basic Arithmetic              | _4    | _0    | _4     |
|          |         |  | 10    | 6     | 12     |
| Winter Q | uarter  |  |       |       |        |
| ELC      | 1102    | Basic Electricity for Air                | 2     | 6     | 4      |
|          |         | Conditioning, Heating, and Refrigeration |       |       |        |
| ISC      | 1101    | General Industrial Survey                | 4     | 0     | 4      |
| WLD      | 1101    | Basic Gas Welding                        | 1     | _3    | _2     |
|          |         |  | 7     | 9     | 10     |
| Spring Q | uarter  |  |       |       |        |
| AHR      | 1115    | Fundamentals of Heating                  | 2     | 6     | 4      |
| BPR      | 1116    | Blueprint Reading: Air Conditioning      | 4     | 0     | 4      |
|          |         | Conditioning                             | _     |       | —      |
|          |         |  | 6     | 6     | 8      |
| Summer   | Quarter |  |       |       |        |
| AHR      | 1123    | Principles of Air Conditioning I         | 2     | 6     | 4      |
| PHY      | 1101    | Applied Physics                          | 4     | _0    | _4     |
|          |         |  | 6     | 6     | 8      |

|           |         |  | Class | Hours<br>Lab | Credit |
|-----------|---------|--|-------|--------------|--------|
| SECOND    | YEAR    |  |       |              |        |
| Fall Quar | ter     |  |       |              |        |
| AHR       | 1128    | Automatic Controls                           | 2     | 6            | 4      |
| ENG       | 1102    | Communication Skills                         | _4    | 0            | _4     |
|           |         |  | 6     | 6            | 8      |
| Winter Qu | uarter  |  |       |              |        |
| AHR       | 1126    | All Year Comfort Systems                     | 2     | 6            | 4      |
| PSY       | 1101    | Human Relations                              | _4    | _0           | _4     |
|           |         |  | 6     | 6            | 8      |
| Spring Q  | uarter  |  |       |              |        |
| AHR       | 1122    | Domestic & Commercial Refrigeration          | 2     | 6            | 4      |
| AHR       | 1131    | State AC, Heat, Refrigeration License<br>Law | 4     | 0            | 4      |
|           |         |  | 6     | 6            | 8      |
| Summer    | Ouerter |  | Ü     | Ü            | Ü      |
| AHR       | 1124    | Air Condition and Defrigoration              | 2     | 6            | 4      |
| АПК       | 1124    | Air Condition and Refrigeration Servicing    | 2     | О            | 4      |
| AHR       | 1130    | Year Around Duct System Design               | _4    | _0           | _4     |
|           |         |  | 6     | 6            | 8      |

Total hours required for graduation = 70

#### **AUTO BODY REPAIR (V001)**

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding and refinishing.

Repairing, straightening, aligning, metal finishing and painting of automobile bodies and frames are typical jobs performed. Job titles include automobile body repairperson, automotive painter, and frame and chassis repairperson. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

Upon successful completion of the program, the student will demonstrate the ability to:

- Clean and prepare a surface for paint that is properly treated, 1. sanded, primered, and free of dirt, wax or grease.
- Straighten and align body panels, prepare for and apply body 2. filler, and shape body panels to the right contour making sure that they fit and operate correctly.
- Cut and weld body metal using approved methods. 3.
- Remove and replace fixed and movable automobile glass. 4.
- Repair or replace fixed and movable automobile plastic com-5. ponents as applicable.
- Check unibody structural alignment using measuring system 6. and appropriate guages.

### COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |        |                                 |       | Hours |        |
|-----------|--------|---------------------------------|-------|-------|--------|
| Fall Quar | ter    | Title                           | Class | Shop  | Credit |
| AUT       | 1111   | Auto Body Repair I              | 2     | 6     | 4      |
| AUT       | 1311   | Auto Body Repair II             | 3     | 9     | 6      |
| MAT       | 1101   | Vocational Basic Arithmetic     | 4     | 0     | 4      |
| DFT       | 110    | Introduction to Drafting        | _4    | 0     | _4     |
|           |        |                                 | 13    | 15    | 18     |
| Winter Q  | uarter |                                 |       |       |        |
| AUT       | 1112   | Auto Body Repair III            | 2     | 6     | 4      |
| AUT       | 1312   | Auto Body Repair IV             | 3     | 9     | 6      |
| PHY       | 1101   | Applied Physics                 | 4     | 0     | 4      |
| WLD       | 1105   | Auto Body Welding               | _1    | _3    | _2     |
|           |        |                                 | 10    | 18    | 16     |
| Spring Q  | uarter |                                 |       |       |        |
| AUT       | 1113   | Metal Finishing and Painting I  | 2     | 6     | 4      |
| AUT       | 1313   | Metal Finishing and Painting II | 3     | 9     | 6      |
| ENG       | 1102   | Communication Skills            | 4     | 0     | 4      |
| ISC       | 1101   | General Industrial Survey       | _4    | 0     | _4     |
|           |        |                                 | 13    | 15    | 18     |

| Summer | Quarter |                           | Class | Hours<br>Lab | Credit |
|--------|---------|---------------------------|-------|--------------|--------|
| AUT    | 1114    | Body Shop Applications I  | 2     | 6            | 4      |
| AUT    | 1314    | Body Shop Applications II | 3     | 9            | 6      |
| PSY    | 1101    | Human Relations           | 4     | 0            | 4      |
| BUS    | 287     | Small Business Management | _4    | 0            | _4     |
|        |         |                           | 13    | 15           | 18     |

Total hours required for graduation = 70

### NIGHT SEQUENCE

|           |         | NIGHT SEQUENCE                  |       |       |        |
|-----------|---------|---------------------------------|-------|-------|--------|
| FIRST YE  | AR      |                                 |       | Hours |        |
| Fall Quar | ter     | Title                           | Class | Shop  | Credit |
| AUT       | 1111    | Auto Body Repair I              | 2     | 6     | 4      |
| MAT       | 1101    | Vocational Basic Arithmetic     | _4    | 0     | _4     |
|           |         |                                 | 6     | 6     | 8      |
| Winter Q  | uarter  |                                 |       |       |        |
| AUT       | 1311    | Auto Body Repair II             | 3     | 9     | 6      |
| DFT       | 110     | Introducing to Drafting         | 4     | 0     | _4     |
|           |         |                                 | 7     | 9     | 10     |
| Spring Q  | uarter  |                                 |       |       |        |
| AUT       | 1112    | Auto Body Repair III            | 2     | 6     | 4      |
| PHY       | 1101    | Applied Physics                 | 4     | 0     | _4     |
|           |         | .,                              | 6     | 6     | 8      |
|           |         |                                 | 0     | 0     | 0      |
| Summer    |         | 4 . 5 . 5 . 17                  |       | •     | _      |
| AUT       | 1313    | Auto Body Repair IV             | 3     | 9     | 6      |
| WLD       | 1105    | Auto Body Welding               | _1    | _3    | _2     |
|           |         |                                 | 4     | 12    | 8      |
| SECOND    | YEAR    |                                 |       |       |        |
| Fall Quar | ter     |                                 |       |       |        |
| AUT       | 1113    | Metal Finishing and Painting I  | 2     | 6     | 4      |
| ISC       | 1101    | General Industrial Survey       | _4    | 0     | 4      |
|           |         |                                 | 6     | 6     | 8      |
| Winter Q  | uarter  |                                 | _     |       |        |
| AUT       | 1313    | Metal Finishing and Painting II | 3     | 9     | 6      |
| ENG       | 1102    | Communication Skills            | _4    | 0     | 4      |
|           |         |                                 |       |       |        |
|           |         |                                 | 7     | 9     | 10     |
| Spring Q  |         | 5 1 01 4 11 11                  |       | _     |        |
| AUT       | 1114    | Body Shop Applications I        | 2     | 6     | 4      |
| PSY       | 1101    | Human Relations                 | _4    | _0    | 4      |
|           |         |                                 | 6     | 6     | 8      |
| Summer    | Quarter |                                 |       |       |        |
| AUT       | 1314    | Body Shop Applications II       | 3     | 9     | 6      |
| BUS       | 287     | Small Business Management       | 4     | 0     | 4      |
|           |         |                                 | 7     | 9     | 10     |
|           |         |                                 | •     | 9     | 10     |

# **AUTOMOTIVE MECHANICS** (V003)

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions and shop practices.

Automobile mechanics maintain and repair mechanical, electrical and body parts of passenger cars, trucks and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

Upon successful completion of the program, the student will demonstrate ability in the following areas:

- Rebuilding of internal combustion engines 1.
- Parts identification 2.
- 3. Engine problem analysis
- Charging and trouble-shooting auto air conditioning 4.
- Diagnosing and repairing alignment problems 5.
- Analyzing and repairing fuel system problems 6.

### COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |        |                                |       | Hours |        |
|-----------|--------|--------------------------------|-------|-------|--------|
| Fall Quar | rter   | Title                          | Class | Shop  | Credit |
| AUT       | 1101   | Internal Combustion Engines I  | 5     | 3     | 6      |
| MEC       | 1199   | Automotive Machine Shop        | 2     | 6     | 4      |
| MAT       | 1101   | Vocational Basic Arithmetic    | 4     | 0     | 4      |
| DFT       | 110    | Introduction to Drafting       | 4     | 0     | _4     |
|           |        |                                | 15    | 9     | 18     |
| Winter Q  | uarter |                                |       |       |        |
| AUT       | 1301   | Internal Combustion Engines II | 2     | 6     | 4      |
| AUT       | 1103   | Automotive Analyzing Equipment | 5     | 3     | 6      |
| PHY       | 1101   | Applied Physics                | _4    | 0     | _4     |
|           |        |                                | 11    | 9     | 14     |
| Spring Q  | uarter |                                |       |       |        |
| AUT       | 1123   | Brakes                         | 2     | 6     | 4      |
| AHR       | 1101   | Auto Air Conditioning          | 2     | 6     | 4      |
| ENG       | 1102   | Communication Skills           | 4     | 0     | 4      |
| AUT       | 1127   | Power Accessories              | _1    | 3     | _2     |
|           |        |                                | ٥     | 15    | 1/     |

|        |         |                           | Hours |     |       |
|--------|---------|---------------------------|-------|-----|-------|
|        |         |                           | Class | Lab | Credi |
| Summer | Quarter |                           |       |     |       |
| AUT    | 1302    | Fuel Systems              | 5     | 3   | 6     |
| AUT    | 1102    | Engine Electrical Systems | 5     | 3   | 6     |
| AUT    | 1221    | Front Alignment           | 2     | 6   | 4     |
| PSY    | 1101    | Human Relations           | _4    | _0  | _4    |
|        |         |                           | 16    | 12  | 20    |

Total hours required for graduation = 66

### **NIGHT SEQUENCE**

|                      |         | NIGHT SEQUENCE                 |       |       |          |
|----------------------|---------|--------------------------------|-------|-------|----------|
| FIRST YE             | AR      |                                |       | Hours |          |
| Fall Quar            | ter     | Title                          | Class | Shop  | Credit   |
| AUT                  | 1101    | Internal Combustion Engines I  | 5     | 3     | 6        |
| MAT                  | 1101    | Vocational Basic Arithmetic    | 4     | 0     | 4        |
|                      |         |                                |       |       |          |
|                      |         |                                | 9     | 3     | 10       |
| Winter Qu            |         |                                |       |       |          |
| MEC                  | 1199    | Automotive Machine Shop        | 2     | 6     | 4        |
| DFT                  | 110     | Introduction to Drafting       | _4    | _0    | _4       |
|                      |         |                                | 6     | 6     | 8        |
| Spring Qu            | iartor  |                                |       |       |          |
| AUT                  | 1301    | Internal Combustion Engines II | 2     | 6     | 4        |
| PHY                  | 1101    | Applied Physics                | 4     | 0     | 4        |
| FILL                 | 1101    | Applied Filysics               |       |       |          |
|                      |         |                                | 6     | 6     | 8        |
| Summer (             | Quarter |                                |       |       |          |
| AUT                  | 1103    | Automotive Analyzing Equipment | 5     | 3     | 6        |
| AUT                  | 1227    | Power Accessories              | _1    | 3     | _2       |
|                      |         |                                | 6     | 6     | 8        |
| OFOOND               | VEAD    |                                | U     | U     | O        |
| SECOND<br>Fall Quart |         |                                |       |       |          |
| AUT                  | 1123    | Brakes                         | 0     | 6     | 4        |
| ENG                  | 1102    | Communication Skills           | 2     |       |          |
| ENG                  | 1102    | Communication Skills           | _4    | 0     | <u>4</u> |
|                      |         |                                | 6     | 6     | 8        |
| Winter Qu            | uarter  |                                |       |       |          |
| AHR                  | 1101    | Auto Air Conditioning          | _2    | 6     | _4       |
|                      |         |                                |       | 6     | <u> </u> |
|                      |         |                                | 2     | О     | 4        |
| Spring Qu            |         | - 10 .                         | _     |       | _        |
| AUT                  | 1302    | Fuel Systems                   | 5     | 3     | 6        |
| PSY                  | 1101    | Human Relations                | _4    | 0     | _4       |
|                      |         |                                | 9     | 3     | 10       |
| Summer (             | Quarter |                                |       |       |          |
| AUT                  | 1102    | Engine Electrical Systems      | 5     | 3     | 6        |
| AUT                  | 1221    | Front Alignment                | _2    | 6     | 4        |
| ,,,,,                |         | · Tone / significant           |       |       |          |
|                      |         |                                | 7     | 9     | 10       |
|                      |         |                                |       |       |          |

Total hours required for graduation = 66

# RESIDENTIAL CARPENTRY (V007) (PRISON PROGRAM ONLY)

The Residential Carpentry curriculum trains students to construct and make repairs to residential structures using standard building materials and hand and power tools. This curriculum is designed to teach carpentry skills and a general knowledge of residential construction. Instruction also includes the study of mathematics, blueprint reading, building codes and energy efficient construction.

Graduates will have a working knowledge of building materials, concrete form construction, rough framing, roofing, stair construction, insulation and the application of interior and exterior trim.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

Upon successful completion of the program, the student will demonstrate the ability to:

- Use and understand basic construction math, including use 1. of rules, "plumb bobs," and the framing square.
- Interpret blueprints and specifications, and build from a draw-2. ing.
- 3. Understand strengths of material and make appropriate
- 4. Use most power tools, including saws, and drills.
- Use safety practices. 5.

#### COURSE AND HOUR REQUIREMENTS

|          |        |                             |       | Hours |        |
|----------|--------|-----------------------------|-------|-------|--------|
| Fall Qua | rter   | Title                       | Class | Shop  | Credit |
| CAR      | 1101   | Carpentry I                 | 2     | 6     | 4      |
| CAR      | 1301   | Carpentry II                | 2     | 6     | 4      |
| BPR      | 1001   | Blueprint Layout and Design | 4     | 0     | 4      |
| MAT      | 1101   | Vocational Basic Arithmetic | 4     | _0    | _4     |
|          |        |                             | 12    | 12    | 16     |
| Winter C | uarter |                             |       |       |        |
| CAR      | 1102   | Carpentry III               | 2     | 6     | 4      |
| CAR      | 1302   | Carpentry IV                | 2     | 6     | 4      |
| ENG      | 1102   | Communication Skills        | 4     | 0     | 4      |
| WWK      | 1306   | Introduction to Woodworking | 4     | 0     | _4     |
|          |        |                             | 12    | 12    | 16     |

|          |         |                           | Hours |     |        |
|----------|---------|---------------------------|-------|-----|--------|
|          |         |                           | Class | Lab | Credit |
| Spring Q | uarter  |                           |       |     |        |
| CAR      | 1103    | Carpentry V               | 2     | 6   | 4      |
| CAR      | 1303    | Carpentry VI              | 2     | 6   | 4      |
| MEC      | 1135    | Mechanical Installation   | 4     | 0   | 4      |
| BUS      | 287     | Small Business Management | 4     | 0   | 4      |
| MAT      | 1112    | Construction Estimating   | _4    | 0   | 4      |
|          |         |                           | 16    | 12  | 20     |
| Summer   | Quarter |                           |       |     |        |
| CAR      | 1104    | Carpentry VII             | 2     | 6   | 4      |
| CAR      | 1304    | Carpentry VIII            | 2     | 6   | 4      |
| CAR      | 1305    | Building Code             | 4     | 0   | 4      |
| PSY      | 1101    | Human Relations           | 4     | 0   | 4      |
| CAR      | 1106    | Construction Seminar      | _4    | 0   | _4     |
|          |         |                           | 16    | 12  | 20     |

Total hours required for graduation = 72

### COSMETOLOGY (V009) (Certificate)

If you are interested in a challenging and rewarding career and like to use vour creative talents to work with people, hairstyles, makeup and clothes, than a career in cosmetology may be right for you.

The field of cosmetology is based on scientific principles. The Cosmetology curriculum offers instruction in manicuring, shampooing, permanent waving, facials, massages, scalp treatments, hair cutting, and styling and wig service.

Cosmetology is offered day or night by contracting on either a fulltime or part-time schedule. Students will register for both classes during a quarter (theory and clinical).

To receive a Cleveland Community College certificate, a student must complete 72 credit hours (1500 contact hours).

Upon completion of this program and successful passing of a comprehensive examination administered by the North Carolina State Board of Cosmetic Arts, a license is given.

The cosmetologist is called upon to advise men and women on problems of makeup and care of the hair, skin and hands including nails. Employment opportunities are available in beauty salons, private clubs, department stores, and women's specialty shops. You may decide to set up your own business.

#### COURSE AND HOUR REQUIREMENTS

|           |         |                          |       | Hours     | :         |
|-----------|---------|--------------------------|-------|-----------|-----------|
| First Qua | rter    |                          | Class | Lab       | Credit    |
| cos       | 1001    | Scientific Study I       | 7     | 15        | 12        |
| cos       | 1011    | Mannequin Practice       | _0    | <u>18</u> | 6         |
|           |         |                          | 7     | 33        | 18        |
| Second (  | Quarter |                          |       |           |           |
| COS       | 1002    | Scientific Study         | 7     | 0         | 7         |
| cos       | 1022    | Clinical Applications I  | _0    | 33        | <u>18</u> |
|           |         |                          | 7     | 33        | 18        |
| Third Qu  | arter   |                          |       |           |           |
| COS       | 1003    | Scientific Study III     | 7     | 0         | 7         |
| cos       | 1033    | Clinical Applications II | 0     | 33        | <u>11</u> |
|           |         |                          | 7     | 33        | 18        |
| Fourth Q  | uarter  |                          |       |           |           |
| COS       | 1004    | Scientific Study IV      | 7     | 0         | 7         |
| cos       | 1044    | Clinical Applications    | _0    | 33        | 18        |
|           |         |                          | 7     | 33        | 18        |

Total credit hours = 72 Total contact hours = 1500

# ELECTRICAL INSTALLATION (V018)

The Electrical Installation and Maintenance curriculum is designed to provide a training program in the basic knowledge, fundamentals and practices involved in the electrical trades. A large segment of the program is laboratory and shop instruction designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of this curriculum is qualified to enter an electrical trade as an on-the-job trainee or apprentice, assisting in the layout, installation, check out and maintenance systems in residential, commercial or industrial settings.

Upon completion of this program, the student will:

- Understand current flow, voltage levels and systems, basic motor and transformer connections, and the laws of power.
- 2. Understand wire and troubleshoot basic motor control circuits.
- 3. Wire and program basic programmable controllers.
- 4. Have a working knowledge of residential wiring and all the circuitry involved—lighting, receptacles, appliances, heating, and air conditioning.
- 5. Have a working knowledge of commercial and industrial systems, conduit bending, identifying and sizing electrical equipment, and basic blueprint reading.
- 6. Have a basic knowledge of the National Electric Code.

# COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |         |                                |       | Hours |        |
|-----------|---------|--------------------------------|-------|-------|--------|
| Fall Qu   | ıarter  | Title                          | Class | Shop  | Credit |
| ELC       | 1111    | Basic Electrical Circuits,     | 4     | 3     | 5      |
|           |         | Machines, and Transformers I   |       |       |        |
| ELC       | 1311    | Basic Electrical Circuits,     | 4     | 3     | 5      |
|           |         | Machines and Transformers II   |       |       |        |
| MAT       | 1101    | Vocational Basic Arithmetic    | 4     | 0     | 4      |
| DFT       | 110     | Introduction to Drafting       | 4     | 0     | 4      |
| BPR       | 1113    | Blueprint Reading: Electrical  | _4    | 0     | _4     |
|           |         |                                | 20    | 6     | 22     |
| 140 . 4 . |         |                                | 20    | U     | 22     |
| winter    | Quarter |                                |       |       |        |
| ELC       | 1113    | AC/DC Machines and Controls I  | 2     | 6     | 4      |
| ELC       | 1313    | AC/DC Machines and Controls II | 2     | 6     | 4      |
| PHY       | 1101    | Applied Physics                | 4     | 0     | 4      |
| MAT       | 1110    | Electrical Mathematics         | 4     | 0     | 4      |
|           |         |                                | 12    | 12    | 16     |

|          |         |                                   |       | Hours |        |  |
|----------|---------|-----------------------------------|-------|-------|--------|--|
|          |         |                                   | Class | Lab   | Credit |  |
| Spring C | uarter  |                                   |       |       |        |  |
| ELC      | 1124    | Residential Wiring I              | 2     | 6     | 4      |  |
| ELC      | 1324    | Residential Wiring II             | 2     | 6     | 4      |  |
| ENG      | 1102    | Communication Skills              | 4     | 0     | 4      |  |
| ELN      | 1103    | Solid State Devices               | _4    | _0    | _4     |  |
|          |         |                                   | 12    | 12    | 16     |  |
| Summer   | Quarter |                                   |       |       |        |  |
| ELC      | 1125    | Commercial & Industrial Wiring I  | 2     | 6     | 4      |  |
| ELC      | 1325    | Commercial & Industrial Wiring II | 2     | 6     | 4      |  |
| PSY      | 1101    | Human Relations                   | 4     | 0     | 4      |  |
| ELC      | 1114    | National Electric Code            | 4     | 0     | 4      |  |
| ELN      | 251     | Intro to PLC's                    | _4    | _0    | _4     |  |
|          |         |                                   | 16    | 12    | 20     |  |

Total hours required for graduation = 74

### NIGHT SEQUENCE

| FIRST YE            | AR     |   |       | Hours |        |  |
|---------------------|--------|---|-------|-------|--------|--|
| Fall Quar           | ter    | Title   | Class | Shop  | Credit |  |
| ELC                 | 1111   | Basic Electrical Circuits,  Machines and Transformers I | 4     | 3     | 5      |  |
| MAT                 | 1101   | Vocational Basic Arithmetic                             | 4     | _0    | 4      |  |
|                     |        |   | 8     | 3     | 9      |  |
| Winter Q            |        |   |       |       |        |  |
| ELC                 | 1311   | Basic Electrical Circuits, Machines and Transformers II | 4     | 3     | 5      |  |
| MAT                 | 1110   | Electrical Mathematics                                  | 4     | 0     | 4      |  |
| PHY                 | 1101   | Applied Physics   | 4     | 0     | _4     |  |
|                     |        |   | 12    | 3     | 13     |  |
| Spring Q            |        |   |       |       |        |  |
| ELC                 | 1113   | AC/DC Machines and Controls I                           | 2     | 6     | 4      |  |
| BPR                 | 1113   | Blueprint Reading: Electrical                           | 4     | 0     | 4      |  |
| ENG                 | 1102   | Communication Skills                                    | _4    | 0     | _4     |  |
|                     |        |   | 10    | 6     | 12     |  |
| Summer              |        |   |       |       |        |  |
| ELC                 | 1313   | AC/DC Machines and Controls II                          | 2     | 6     | 4      |  |
| PSY                 | 1101   | Human Relations   | _4    | _0    | 4      |  |
|                     |        |   | 6     | 6     | 8      |  |
| SECOND<br>Fall Quar |        |   |       |       |        |  |
| ELC                 | 1124   | Residential Wiring I                                    | 2     | 6     | 4      |  |
| DFT                 | 110    | Introduction to Drafting                                | _4    | 0     | _4     |  |
|                     |        |   | 6     | 6     | 8      |  |
| Winter Q            | uarter |   |       |       |        |  |
| ELC                 | 1324   | Residential Wiring II                                   | 2     | 6     | 4      |  |
| ELN                 | 1103   | Solid State Devices                                     | _4    | 0     | _4     |  |
|                     |        |   | 6     | 6     | 8      |  |

# 140 / Diploma Credit Programs

|          |         |                                   | Class | Hours<br>Lab | Credit |
|----------|---------|-----------------------------------|-------|--------------|--------|
| Spring ( | Quarter |                                   |       |              |        |
| ELC      | 1125    | Commercial & Industrial Wiring I  | 2     | 6            | 4      |
| ELN      | 251     | Introduction to PLC's             | 4     | _0           | _4     |
|          |         |                                   | 6     | 6            | 8      |
| Summer   | Quarter |                                   |       |              |        |
| ELC      | 1325    | Commercial & Industrial Wiring II | 2     | 6            | 4      |
| ELC      | 1114    | National Electrical Code          | _4    | _0           | _4     |
|          |         |                                   | 6     | 6            | 8      |

Total hours required for graduation = 74



# FOODSERVICE SPECIALIST (V053) (PRISON PROGRAM ONLY)

The Foodservice Specialist curriculum trains students in the art and science of quantity food preparation with particular emphasis on institutional food service. Using a career ladder concept, it is an openended curriculum allowing the students more flexibility in their training. In addition to development of knowledge and skills in the art and science of food preparation, the student must develop an understanding and appreciation of food and equipment purchasing, financial control, recordkeeping, basic nutrition and menu planning, and supervision.

A graduate of this curriculum should be qualified for entry into positions as assistant cook, short-order cook, cook, chef's assistant, cook manager, baker, assistant baker, and pastry cook. Employment needs for graduates of this program are found in hospitals, nursing homes, child care centers, college and university foodservice, school foodservice, industrial cafeterias, private clubs, airline foodservice, food processing manufacturers, foodservice contract companies, and commercial restaurants.

Upon successful completion of this program, the student will have demonstrated the ability to:

- Observe and follow proper personal hygiene rules in the 1. kitchen.
- 2. Correctly sanitize a kitchen.
- Work kitchen equipment properly. 3.
- Handle small wares correctly. 4.
- Cook meats and vegetables. 5.
- Prepare salads. 6.
- Have a working knowledge of spices. 7.
- 8. Bake bread and desserts.
- Cook an entire meal. 9.

### COURSE AND HOUR REQUIREMENTS

|                |      |                                 |       | Hours |        |  |
|----------------|------|---------------------------------|-------|-------|--------|--|
| Fall Quarter   |      | Title                           | Class | Shop  | Credit |  |
| FSO            | 1102 | Food Preparation and Baking I   | 2     | 6     | 4      |  |
| MAT            | 1101 | Vocational Basic Arithmetic     | 4     | 0     | 4      |  |
| FSO            | 1103 | Sanitation Safety and Equipment | 4     | 0     | 4      |  |
| FSO            | 1302 | Food Preparation and Baking II  | _2    | 6     | 4      |  |
|                |      |                                 | 12    | 12    | 16     |  |
| Winter Quarter |      |                                 |       |       |        |  |
| FSO            | 1112 | Food Preparation and Baking III | 2     | 6     | 4      |  |
| FSO            | 1105 | Purchasing                      | 2     | 0     | 2      |  |
| FSO            | 1109 | Production Management           | 2     | 0     | 2      |  |
| MAT            | 1102 | Food Service Math               | 4     | 0     | 4      |  |
| FSO            | 1312 | Food Preparation and Baking IV  | _2    | 6     | _4     |  |
|                |      |                                 | 12    | 12    | 16     |  |

# 142 / Diploma Credit Programs

|                |        |                            |       | Hours    |        |  |
|----------------|--------|----------------------------|-------|----------|--------|--|
|                |        |                            | Class | Lab      | Credit |  |
| Spring Q       | uarter |                            |       |          |        |  |
| FSO            | 1122   | Food Preparation V         | 2     | 6        | 4      |  |
| FSO            | 1106   | Menu Planning              | 3     | 0        | 3      |  |
| ENG            | 1102   | Communication SKills       | 4     | 0        | 4      |  |
| NUT            | 101    | Nutrition and Diet Therapy | 3     | 0        | 3      |  |
| FSO            | 1322   | Food Preparation VI        | _2    | 6        | 4      |  |
|                |        |                            | 14    | 12       | 18     |  |
| Summer Quarter |        |                            |       |          |        |  |
| FSO            | 1116   | Baking V                   | 2     | 6        | 4      |  |
| FSO            | 1108   | Personnel Management       | 2     | 0        | 2      |  |
| RED            | 1101   | Reading Improvement        | 4     | 0        | 4      |  |
| PSY            | 1101   | Human Relations            | 4     | 0        | 4      |  |
| FSO            | 1316   | Baking VI                  | _2    | <u>6</u> | _4     |  |
|                |        |                            | 14    | 12       | 18     |  |

Total hours required for graduation = 68

# INDUSTRIAL MAINTENANCE (V028)

The curriculum in Industrial Maintenance prepares students to repair and maintain machinery, electrical wiring and fixtures, and hydraulic and pneumatic devices found in industrial establishments.

Industrial maintenance persons may be required to install, maintain and service mechanical equipment; follow blueprints and sketches; and use hand tools, metalworking machines, measuring instruments and testing instruments. They operate metalworking machines such as lathe, milling machines and drill press to make repairs. They use the micrometer and calipers to verify dimensions. They assemble wires, insulation and electrical components using hand tools and soldering equipment. They test electrical circuits and components to locate shorts, faulty connections and defective parts. They inspect, test and repair hydraulic equipment.

Upon completion, students will have demonstrated ability in the following areas:

- Electrical circuits and motor controls 1.
- 2. Basic machining operations
- Heating, refrigeration, and air conditioning principles 3.
- Basic welding repairs and fabrication 4.
- Mechanical maintenance to include: 5.

**Fasteners** 

Hydraulics

**Pneumatics** 

Piping and pipe insulation

**Pumps** 

Rigging

## COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |        |                                    |       | Hours |        |
|-----------|--------|------------------------------------|-------|-------|--------|
| Fall Quar | ter    | Title                              | Class | Shop  | Credit |
| MEC       | 1101   | Machine Shop Theory & Practices I  | 2     | 6     | 4      |
| MEC       | 1301   | Machine Shop Theory & Practices II | 2     | 6     | 4      |
| MAT       | 1101   | Vocational Basic Arithmetic        | 4     | 0     | 4      |
| DFT       | 110    | Introduction to Drafting           | _4    | 0     | _4     |
|           |        |                                    | 12    | 12    | 16     |
| Winter Qu | uarter |                                    |       |       |        |
| ELC       | 1113   | AC/DC Machines and Controls I      | 2     | 6     | 4      |
| ELC       | 1313   | AC/DC Machines and Controls II     | 2     | 6     | 4      |
| PHY       | 1101   | Applied Physics                    | 4     | 0     | 4      |
| BPR       | 1104   | Blueprint Reading: Mechanical      | 3     | 0     | 3      |
| HYD       | 1105   | Hydraulic Fundamentals             | 4     | 0     | _4     |
|           |        |                                    | 15    | 12    | 19     |

|          |         |  |       | Hours |        |
|----------|---------|--|-------|-------|--------|
|          |         |  | Class | Lab   | Credit |
| Spring Q | uarter  |  |       |       |        |
| AHR      | 1121    | Principles of Refrigeration            | 2     | 6     | 4      |
| AHR      | 1115    | Fundamentals of Heating                | 2     | 6     | 4      |
| ENG      | 1102    | Communication Skills                   | 4     | 0     | 4      |
| ISC      | 1101    | General Industrial Survey              | 4     | 0     | 4      |
| COE      | 101     | Work Experience (or elective)          | _3    | _0    | 3      |
|          |         |  | 15    | 12    | 19     |
| Summer   | Quarter |  |       |       |        |
| WLD      | 1122    | Commercial and Industrial Practices I  | 2     | 6     | 4      |
| WLD      | 1322    | Commercial and Industrial Practices II | 3     | 9     | 6      |
| PSY      | 1101    | Human Relations                        | 4     | 0     | 4      |
| MNT      | 1133    | Mechanical Maintenance                 | _3    | _3    | _4     |
|          |         |  | 12    | 18    | 18     |

Total hours required for graduation = 72

# **NIGHT SEQUENCE**

| FIRST Y  | EAR     |   |       | Hours    |       |
|----------|---------|---|-------|----------|-------|
| Fall Qua | rter    | Title                                   | Class | Shop     | Credi |
| MEC      | 1101    | Machine Shop Theory and<br>Practices I  | 2     | 6        | 4     |
| MAT      | 1101    | Vocational Basic Arithmetic             | 4     | 0        | 4     |
|          |         |   | 6     | 6        | 8     |
| Winter C | uarter  |   |       |          |       |
| MEC      | 1301    | Machine Shop Theory and<br>Practices II | 2     | 6        | 4     |
| DFT      | 110     | Introduction to Drafting                | 4     | 0        | 4     |
|          |         | · ·                                     | 6     | 6        | <br>8 |
|          |         |   | ь     | 0        | 0     |
| Spring C |         |   |       |          |       |
| ELC      | 1113    | AC/DC Machines and Controls I           | 2     | 6        | 4     |
| PHY      | 1101    | Applied Physics                         | 4     | 0        | 4     |
| ENV      | 1105    | Hydraulic Fundamentals                  | _4    | _0       | _4    |
|          |         |   | 10    | 6        | 12    |
| Summer   | Quarter |   |       |          |       |
| ELC      | 1313    | AC/DC Machines and Controls II          | 2     | 6        | 4     |
| BPR      | 1104    | Blueprint Reading: Mechanical           | 3     | 0        | _3    |
|          |         |   |       | <u> </u> | 7     |
| SECON    | YEAR    |   | · ·   |          | ·     |
| Fall Qua | rter    |   |       |          |       |
| AHR      | 1121    | Principles of Refrigeration             | 2     | 6        | 4     |
| ISC      | 1101    | General Industrial Survey               | 4     | 0        | 4     |
| COE      | 101     | Work Experience (or elective)           | _3    | 0        | 3     |
| 002      | 101     | Tront Exponence (or elective)           |       | _        |       |
|          |         |   | 9     | 6        | 11    |
| Winter G | uarter  |   |       |          |       |
| AHR      | 1115    | Fundamentals of Heating                 | 2     | 6        | 4     |
| ENG      | 1102    | Communication Skills                    | _4    | _0       | _4    |
|          |         |   | 6     | <br>6    | 8     |
|          |         |   | 0     | 0        | 0     |

|          |         |  |       | Hours |        |  |
|----------|---------|--|-------|-------|--------|--|
|          |         |  | Class | Lab   | Credit |  |
| Spring Q | uarter  |  |       |       |        |  |
| WLD      | 1122    | Commercial and Industrial Practices I  | 2     | 6     | 4      |  |
| PSY      | 1101    | Human Relations                        | 4     | 0     | 4      |  |
|          |         |  | 6     | 6     | 8      |  |
| Summer   | Quarter |  |       |       |        |  |
| WLD      | 1322    | Commercial and Industrial Practices II | 3     | 9     | 6      |  |
| MNT      | 1133    | Mechanical Maintenance                 | _3    | _3    | 4      |  |
|          |         |  | 6     | 12    | 10     |  |

Total hours required for graduation = 72

Electives can be chosen from other curriculum course offerings in the catalog (subject to Department Head's approval).



# MACHINIST (V032)

The Machinist curriculum gives the individual the opportunity to acquire basic skills and related technical information necessary to gain employment in the metalworking industries. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. Computer numerical control (CNC) may be integrated into various phases of the curriculum or as specialized courses.

The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing according to blueprints or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate precise part.

In the process of successfully completing the program of study, the student will have demonstrated the ability to:

- 1. Use micrometers, vernier calipers, small hole gauge, telescope gauge, and other precision instruments.
- 2. Operate in a safe manner the basic machines in a modern machine shop such as the lathe, milling machine, drill press, grinders to include lathe taper attachments, milling machine boring head, dial indicators, diving head, and rotary table.
- Read and intercept blueprints and other written instructions for machining; use shop math, such as trigonometry, to solve machining problems.
- 4. Demonstrate an understanding of the machining characteristics of different types of metal and the sharpening of cutting tools and drills.
- 5. Use computer numerical controls to perform machining operations on milling machines and lathes.
- 6. Operate machine keyways in shafts and broach keyways in gears, set up precision angles with sine bar, and lay out surfaces to be machined or holes to be drilled.
- 7. Chase threads on a lathe.
- 8. Work to four plate decimal tolerances.
- 9. Understand the need for honesty, responsibility, and reliability in the work place.
- Exhibit safe work habits and an understanding of OSHA and ANSI.

# COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

|           |        |   |       | Hours |        |
|-----------|--------|---|-------|-------|--------|
| Fall Quar | ter    | Title                                     | Class | Shop  | Credit |
| MEC       | 1101   | Machine Shop Theory and Practices I       | 2     | 6     | 4      |
| MEC       | 1301   | Machine Shop Theory and Practices II      | 2     | 6     | 4      |
| MAT       | 1101   | Vocational Basic Arithmetic               | 4     | 0     | 4      |
| WLD       | 1330   | Machine Shop Welding                      | 1     | 3     | 2      |
| BPR       | 1305   | Blueprint Reading: Machinist              | _4    | 0     | 4      |
|           |        |   | 13    | 15    | 18     |
| Winter Q  |        |   |       |       |        |
| MEC       | 1102   | Machine Shop Theory and Practices III     | 2     | 6     | 4      |
| MEC       | 1302   | Machine Shop Theory and<br>Practices IV   | 2     | 6     | 4      |
| MAT       | 1103   | Applied Math: Geometry                    | 4     | 0     | 4      |
| PHY       | 1101   | Applied Physics                           | 4     | 0     | 4      |
| MEC       | 1105   | Introduction to CNC Lathe and Mill        | _4    | _0    | _4     |
|           |        |   | 16    | 12    | 20     |
| Spring Q  | uarter |   |       |       |        |
| MEC       | 1103   | Machine Shop Theory and Practices V       | 2     | 6     | 4      |
| MEC       | 1303   | Machine Shop Theory and Practices VI      | 2     | 6     | 4      |
| MAT       | 1104   | Applied Math: Trigonometry                | 4     | 0     | 4      |
| ENG       | 1102   | Communication Skills                      | 4     | 0     | 4      |
| MEC       | 1106   | Programming the CNC Lathe                 | _4    | 0     | 4      |
|           |        |   | 16    | 12    | 20     |
| Summer    |        |   |       |       |        |
| MEC       | 1104   | Machine Shop Theory and Practices VII     | 2     | 6     | 4      |
| MEC       | 1304   | Machine Shop Theory and<br>Practices VIII | 2     | 6     | 4      |
| PSY       | 1101   | Human Relations                           | 4     | 0     | 4      |
| MEC       | 1107   | Programming the CNC Mill                  | _4    | 0     | 4      |
|           |        |   | 12    | 12    | 16     |

Total hours required for graduation = 74

## **NIGHT SEQUENCE**

|                     |         | NIGHT SEQUENCE                           |         |          |          |
|---------------------|---------|--|---------|----------|----------|
| FIRST YE            | AR      |  |         | Hours    |          |
| Fall Quar           | ter     | Title                                    | Class   | Shop     | Credit   |
| MEC                 | 1101    | Machine Shop Theory and<br>Practices I   | 2       | 6        | 4        |
| MAT                 | 1101    | Vocational Basic Arithmetic              | 4       | 0        | 4        |
| BPR                 | 1305    | Blueprint Reading: Machinist             | 4       | 0        | 4        |
|                     |         |  | 10      | 6        | 12       |
| Winter Qu           |         |  |         |          |          |
| MEC                 | 1301    | Machine Shop Theory and<br>Practices II  | 2       | 6        | 4        |
| PSY                 | 1101    | Human Relations                          | 4       | 0        | 4        |
|                     |         |  | -6      | <u> </u> | <u> </u> |
|                     |         |  | 0       | 0        | 0        |
| Spring Q            |         |  |         |          |          |
| MEC                 | 1102    | Machine Shop Theory and<br>Practices III | 2       | 6        | 4        |
| MAT                 | 1103    | Applied Math: Geometry                   | 4       | 0        | 4        |
| WLD                 | 1330    | Machine Shop Welding                     | 1       | _3       | 2        |
|                     |         |  | 7       | 9        | 40       |
|                     |         |  | 1       | 9        | 10       |
| Summer              | Quarter |  |         |          |          |
| MEC                 | 1302    | Machine Shop Theory and<br>Practices IV  | 2       | 6        | 4        |
| PHY                 | 1101    | Applied Physics                          | 4       | 0        | 4        |
|                     |         | · · · pp······························   |         |          | _        |
|                     |         |  | 6       | 6        | 8        |
| SECOND<br>Fall Quar |         |  |         |          |          |
| MEC                 | 1103    | Machine Shop Theory and                  | 2       | 6        | 4        |
|                     |         | Practices V                              |         |          |          |
| MAT                 | 1104    | Applied Math: Trigonometry               | 4       | 0        | 4        |
| MEC                 | 1105    | Introduction to CNC Lathe & Mill         | 4       | 0        | 4        |
| IVILO               | 1105    | Introduction to one Lattle & Mill        | _       | _        | _        |
| Winter Qu           | .artau  |  | 10      | 6        | 12       |
|                     |         | Machine Chan Theory and                  | 2       | 6        | 4        |
| MEC                 | 1303    | Machine Shop Theory and<br>Practices VI  |         |          |          |
| ENG                 | 1102    | Communication Skills                     | 4       | 0        | 4        |
| MEC                 | 1106    | Programming the CNC Lathe                | _4      | 0        | _4       |
|                     |         |  | 10      | 6        | 12       |
| Spring Q            |         |  |         |          |          |
| MEC                 | 1104    | Machine Shop Theory and<br>Practices VII | 2       | 6        | 4        |
| MEC                 | 1107    | Programming the CNC Mill                 | _4      | 0        | _4       |
|                     |         |  |         |          | <br>8    |
| Summer (            | Quarter |  | 6       | О        | 8        |
| MEC                 | 1304    | Machine Shop Theory and                  | 2       | 6        | 4        |
|                     |         | Practices VIII                           |         |          |          |
|                     |         | Total hours required                     | for are | duation  | n - 74   |

Total hours required for graduation = 74

## PLUMBING AND PIPEFITTING (V-037) (PRISON PROGRAM ONLY)

The Plumbing and Pipefitting curriculum is designed to train individuals to repair or install plumbing systems in residences and small commercial buildings. Courses in plumbing practices and pipefitting are included to provide practical experience as well as courses in theory that one must know to advance and keep up to date. Other courses in communication skills, physics, human relations and business operations are provided to assist the individual in occupational arowth.

Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air or other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating and refrigeration units.

Upon successful completion of this course, the student will be able to:

- 1. Perform elementary mathematical operations associated with this trade.
- Interpret blueprint and specifications. 2.
- Route and install motor lines, gas lines and vents. 3.
- Size drains and install them properly. 4.
- Install fixtures (tubs, sinks, etc.) 5.
- Make repairs on existing facilities. 6.

# COURSE AND HOUR REQUIREMENTS

|           |        |                                   |       | Hours |        |  |
|-----------|--------|-----------------------------------|-------|-------|--------|--|
| Fall Quar | ter    | Title                             | Class | Shop  | Credit |  |
| PLU       | 1110   | Plumbing Pipework                 | 4     | 12    | 8      |  |
| BPR       | 1115   | Blueprint Reading: Plumbing       | 4     | 0     | 4      |  |
| MAT       | 1101   | Vocational Basic Arithmetic       | 4     | 0     | 4      |  |
| ENG       | 1102   | Communication Skills              | _4    | _0    | _4     |  |
|           |        |                                   | 16    | 12    | 20     |  |
| Winter Q  | uarter |                                   |       |       |        |  |
| PLU       | 1112   | Installation of Plumbing Fixtures | 2     | 6     | 4      |  |
| PLU       | 1125   | Industrial Piping                 | 3     | 9     | 6      |  |
| PHY       | 1101   | Applied Physics                   | 4     | 0     | 4      |  |
| PSY       | 1101   | Human Relations                   | _4    | 0     | _4     |  |
|           |        |                                   | 13    | 15    | 18     |  |
| Spring Q  | uarter |                                   |       |       |        |  |
| PLU       | 1111   | Domestic Water Systems            | 4     | 9     | 7      |  |
| WLD       | 1101   | Basic Gas Welding                 | 1     | 3     | 2      |  |
| PLU       | 1120   | Low Pressure Steam Systems        | 2     | 6     | 4      |  |
| RED       | 1101   | Reading Improvement               | _4    | 0     | _4     |  |
|           |        |                                   | 11    | 18    | 17     |  |

|        |         |                             |       | Hours |        |  |
|--------|---------|-----------------------------|-------|-------|--------|--|
|        |         |                             | Class | Lab   | Credit |  |
| Summer | Quarter |                             |       |       |        |  |
| PLU    | 1123    | Hot Water and Panel Heating | 3     | 6     | 5      |  |
| BUS    | 0287    | Small Business Management   | 4     | 0     | 4      |  |
| PLU    | 1126    | Hydraulic Systems Plumbing  | 3     | 3     | 4      |  |
| PLU    | 1128    | Plumbing Code               | _4    | _0    | _4     |  |
|        |         |                             | 14    | 9     | 17     |  |

Total hours required for graduation = 72



## WELDING (V050)

The Welding curriculum gives students sound understanding of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction pipefitting, production shops, job shops and many others.

Upon completion of this program, the student will be able to:

- 1. Use oxy welding equipment.
- 2. Use arc welding equipment, stick, mig-tig, and make welds.
- Use shop equipment found in industry. 3.
- Read and understand blueprints. 4.
- Enter the welding industry as a welder's assistant. 5.
- Use all equipment safely. 6.

## COURSE AND HOUR REQUIREMENTS DAY SEQUENCE

| F-11 0    | 4       | Tial                                       | 01    | Hours | 0      |
|-----------|---------|--|-------|-------|--------|
| Fall Quar |         | Title                                      | Class |       | Credit |
| WLD       | 1120    | Oxyacetylene Welding I                     | 2     | 6     | 4      |
| WLD       | 1320    | Oxyacetylene Welding II                    | 3     | 9     | 6      |
| MAT       | 1101    | Vocational Basic Arithmetic                | 4     | 0     | 4      |
| DFT       | 0110    | Introduction to Drafting                   | 4     | _0    | 4      |
|           |         |  | 13    | 15    | 18     |
| Winter Q  | uarter  |  |       |       |        |
| WLD       | 1121    | Arc Welding I                              | 2     | 6     | 4      |
| WLD       | 1321    | Arc Welding II                             | 3     | 9     | 6      |
| PHY       | 1101    | Applied Physics                            | 4     | 0     | 4      |
| BPR       | 1104    | Blueprint Reading: Mechanical              | 3     | 0     | _3     |
|           |         |  | 12    | 15    | 17     |
| Spring Q  | uarter  |  |       |       |        |
| WLD       | 1124    | Pipe Welding I                             | 2     | 6     | 4      |
| WLD       | 1324    | Pipe Welding II                            | 3     | 9     | 6      |
| ENG       | 1102    | Communication Skills                       | 4     | 0     | 4      |
| ISC       | 1101    | General Industrial Survey                  | _4    | 0     | _4     |
|           |         |  | 13    | 15    | 18     |
| Summer    | Quarter |  |       |       |        |
| WLD       | 1122    | Commercial and Industrial Practices I      | 2     | 6     | 4      |
| WLD       | 1322    | Commercial and Industrial Practices II     | 3     | 9     | 6      |
| PSY       | 1101    | Human Relations                            | 4     | 0     | 4      |
| BUS       | 0287    | Small Business Management                  | 4     | 0     | 4      |
| RED       | 1101    | Reading Improvement                        | 4     | 0     | 4      |
|           |         | (Required in the Certificate Program only) |       |       |        |
|           |         |  | 13    | 15    | 18     |

# **NIGHT SEQUENCE**

|           |         | NIGHT SEQUENCE                 |       |       |        |
|-----------|---------|--------------------------------|-------|-------|--------|
| FIRST YE  | AR      |                                |       | Hours |        |
| Fall Quar | ter     | Title                          | Class | Shop  | Credit |
| WLD       | 1120    | Oxyacetylene Welding I         | 2     | 6     | 4      |
| MAT       | 1101    | Vocational Basic Arithmetic    | 4     | 0     | _4     |
|           |         |                                |       |       |        |
|           |         |                                | 6     | 6     | 8      |
| Winter Qu |         |                                |       |       |        |
| WLD       | 1320    | Oxyacetylene Welding II        | 3     | 9     | 6      |
| DFT       | 0110    | Introduction to Drafting       | _4    | 0     | 4      |
|           |         |                                | 7     | 9     | 10     |
|           |         |                                | ′     | 9     | 10     |
| Spring Q  |         | A 34/3/2 1                     |       |       |        |
| WLD       | 1121    | Arc Welding I                  | 2     | 6     | 4      |
| PHY       | 1101    | Applied Physics                | _4    | _0    | _4     |
|           |         |                                | 6     | 6     | 8      |
| Summer (  | Ouarter |                                |       |       |        |
| WLD       | 1321    | Arc Welding II                 | 3     | 9     | 6      |
| VVLD      | 1321    | Blueprint Reading: Mechanical  | _3    | 0     | _3     |
|           |         | bluephilit heading, wechanical |       |       |        |
|           |         |                                | 6     | 9     | 9      |
| SECOND    | YEAR    |                                |       |       |        |
| Fall Quar | ter     |                                |       |       |        |
| WLD       | 1124    | Pipe Welding I                 | 2     | 6     | 4      |
| ISC       | 1101    | General Industrial Survey      | _4    | 0     | 4      |
|           |         | ,                              |       | _     |        |
|           |         |                                | 6     | 6     | 8      |
| Winter Qu |         |                                |       |       |        |
| WLD       | 1324    | Pipe Welding II                | 3     | 9     | 6      |
| ENG       | 1102    | Communication Skills           | _4    | _0    | _4     |
|           |         |                                | 7     | 9     | 10     |
| Spring Qu | tortor. |                                | •     | Ŭ     | .0     |
| WLD       | 1122    | Commercial and Industrial      | 2     | 6     | 4      |
| WLD       | 1122    | Practices I                    | 2     | 0     | 4      |
| DOV       | 4404    |                                |       | _     |        |
| PSY       | 1101    | Human Relations                | _4    | _0    | _4     |
|           |         |                                | 6     | 6     | 8      |
| Summer (  | Quarter |                                |       |       |        |
| WLD       | 1322    | Commercial and Industrial      | 3     | 9     | 6      |
|           |         | Practices II                   |       | _     |        |
| BUS       | 0287    | Small Business Management      | 4     | 0     | 4      |
| 500       | 0201    | oman business management       |       |       | _      |
|           |         |                                | 7     | 9     | 10     |

Total hours required for graduation = 71

## PRACTICAL NURSE EDUCATION (V038) (DAY SCHEDULE ONLY)

The Practical Nursing curriculum graduates are prepared to take the National Council Licensure Examination required to practice as a licensed practical nurse. The Practical Nursing curriculum is designed to develop competencies in practicing the following five components of practice as defined by the North Carolina Nursing Practice Act, 1981: (1) participating in assessing the client's physical and mental health including the client's reaction to illnesses and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) participating in implementing the health care plan developed by the registered nurse and/or prescribed by any person authorized by State law to prescribe such a plan by performing tasks delegated by and performed under the supervision or under orders or directions of a registered nurse, physician licensed to practice medicine, dentist, or other person authorized by State law to provide such supervision; (4) reinforcing the teaching and counseling of a registered nurse, physician licensed to practice medicine in North Carolina, or dentist; (5) reporting and recording the nursing care rendered and the client's response to that care.

Licensed practical nurses may be employed in hospitals, nursing homes, clinics, doctors' offices, industry, and public health agencies.

Individuals desiring a career in practical nursing should be encouraged to take math and science courses in high school.

## COURSE AND HOUR REQUIREMENTS

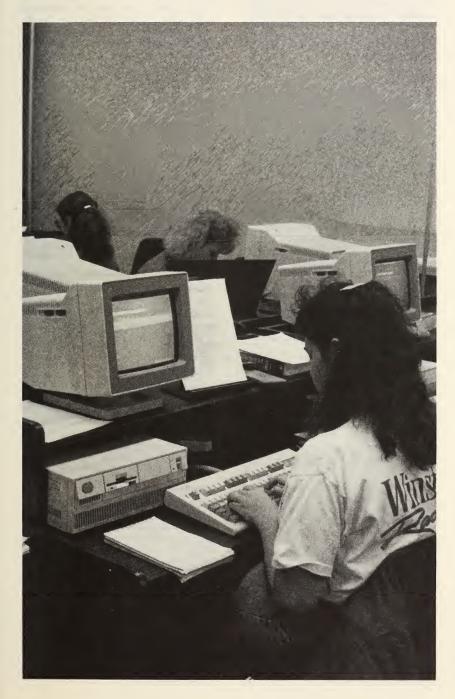
|            |         |                                 | Hours Per Week |     |        | ek     |
|------------|---------|---------------------------------|----------------|-----|--------|--------|
| First Quar | ter     | Title                           | Ciass          | Lab | Clinic | Credit |
| NUR        | 1101    | Fundamentals of Nursing         | 9              | 4   | 0      | 11     |
| NUT        | 0101    | Nutrition and Diet Therapy      | 3              | 0   | 0      | 3      |
| PSY        | 0101    | Introduction to Psychology      | 3              | 0   | 0      | 3      |
| ENG        | 0130    | English Grammar and Composition | 3              | 0   | 0      | 3      |
| BIO        | 0107    | Anatomy and Physiology I        | _3             | _2  | _0     | 4      |
|            |         |                                 | 21             | 6   | 0      | 24     |
| Second (   | Quarter |                                 |                |     |        |        |
| NUR        | 1115    | Medical-Surgical Nursing I      | 6              | 0   | 0      | 6      |
| PHM        | 1104    | Basic Pharmacology              | 3              | 0   | 0      | 3      |
| NUR        | 1112    | Clinical I                      | 0              | 0   | 18     | 6      |
| BIO        | 0108    | Anatomy and Physiology II       | 3              | _2  | _0     | 4      |
|            |         |                                 | 12             | 2   | 18     | 19     |
| Third Qu   | arter   |                                 |                |     |        |        |
| NUR        | 1108    | Obstetrical Nursing             | 5              | 0   | 0      | 5      |
| PHM        | 1111    | Pharmacology                    | 2              | 2   | 0      | 3      |
| NUR        | 1106    | Medical-Surgical Nursing II     | 5              | 0   | 0      | 5      |
| NUR        | 1113    | Clinical II                     | 0              | 0   | 18     | 6      |
|            |         |                                 | 12             | 2   | 18     | 19     |

# 154 / Diploma Credit Programs

|                     |        |                              |     | Hours  | Per Wee | ek |
|---------------------|--------|------------------------------|-----|--------|---------|----|
| First Quarter Title |        | Class                        | Lab | Clinic | Credit  |    |
| Fourth Q            | uarter |                              |     |        |         |    |
| NUR                 | 1109   | Pediatric Nursing            | 6   | 0      | 0       | 6  |
| NUR                 | 1107   | Medical-Surgical Nursing III | 5   | 0      | 0       | 5  |
| NUR                 | 1110   | Vocational Adjustments       | 1   | 0      | 0       | 1  |
| NUR                 | 1114   | Clinical III                 | _0  | _0     | 18      | _6 |
|                     |        |                              | 12  | 0      | 18      | 18 |

Total hours required for graduation = 80

# **COURSE DESCRIPTIONS**



#### **ACCOUNTING**

ACC 120 – Accounting I 4 4 6 Principles, techniques and tools of accounting, summarizing, analyzing and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: BUS 109.

ACC 121 – Accounting II 4 4 6
Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution to management problems. Prerequisite: ACC 120.

ACC 130 – Financial Accounting for Banking 3 0 3

This course is designed especially for those persons who will work in the Banking and Credit Union profession. It will prepare those students who so desire to eable to take the Certified Credit Union Executive Exam. It is being offered at the request of the local credit union and will be elective credit for those completing it. The course includes a study of the Financial Statements from the Bank or Credit Union Point of View, along with the other areas that are unique to the Banking Industry.

ACC 222 – Accounting III 4 4 6 Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capitals. Prerequisite: ACC 121.

ACC 223 – Intermediate
Accounting I 4 4 6

This course represents concepts adhered to in modern accounting, including the principles, procedures, and methods that are applied in the preparation of financial statements. Changes in the form of content of basic financial statements receive special emphasis. Prerequisite: ACC 222.

ACC 224 – Intermediate
Accounting II 4 4 6

This course provides instruction in the organizational, structural, and financial levels of accounting. Special emphasis being given to owners equity, business financing, bonds and notes, etc. Prerequisite: ACC 223.

## ACC 225 - Cost Accounting 1 2 2 3

Nature and purposes of cost accounting; accounting for direct labor, materials and factory burden; job cost and standard cost principles and procedures; selling and distribution cost; budgets and executive use of cost figures. Prerequisite: ACC 222.

# ACC 226-Cost Accounting II 2 2 3

Continued study in cost accounting with emphasis on process cost systems, standard cost accounting and cost analysis for management decision making. Prerequisite: ACC 225.

# ACC 227 – Intermediate Accounting III

This course is designed to complete the student's understanding of accounting procedures. Topics of study are Accounting for Income Taxes, Retained Earnings, Contributed Capital, Non-operating Income, Financial Position Anal-

446

404

303

## ACC 229 - Taxes I

Prerequisite: ACC 224.

Preparation of Individual Tax Returns — 1040EZ, 1040A, 1040, Schedules A and B — are covered in this course, along with other supporting schedules and forms.

ysis, and Future and Present Value.

## ACC 230-Taxes II 4 0 4

This course provides instruction to Business and Professional Tax Returns. More involved and complicated tax situations — Capital Gains and Losses, Retirement Plans, etc. — are given special emphasis. Instruction in Partnership and Corporation Taxes and Tax Returns is also provided. Prerequisite: ACC 229.

# ACC 269 – Auditing

Principles of conducting audits and investigations; setting up accounts based upon audits; collecting data on working papers; arranging and systemizing the audit and writing the audit report. Emphasis is placed on detailed audits, internal auditing and internal control. Prerequisite: ACC 223.

# ACC 291 – Governmental Accounting

This course is designed for persons who are working or would like to work for a governmental agency or nonprofit entity. It would cover topics of study that are unique to this area.

## AIR CONDITIONING, HEATING REFRIGERATION

AHR 1101 - Auto Air Conditioning

264

General introduction to the principles of refrigeration, study of the assembly of the components and connections necessary in the mechanisms, the methods of operation and control; proper handling of refrigerants in charging the sys-

AHR 1115 - Fundamentals of Heating

264

An introduction to the fundamentals of heating and heat transfer related to various types of heating systems. The use and care of tools, using instruments to measure combustion efficiencies and installing equipment and ductwork to make up a heating system are covered. Also, introduced are comfort surveys, heat loss and gain, equipment selection and maintenance, solar heating and heat distribution systems.

AHR 1121 - Principles of Refrigeration

An introduction to the principles of refrigeration, terminology, the use and care of tools and equipment and the identification and function of the components of a system. Other topics to be included will be the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings and basic controls. Practical work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.

## AHR 1122 - Domestic and Commercial Refrigeration

Domestic refrigeration servicing of conventional, hermetic and absorption systems. Cabinet care, controls and system maintenance in domestic refrigerators, freezers and window air conditioning units are stressed. Commercial refrigeration servicing of display cabinets, walkin cooler and freezer units and mobile refrigeration systems is studied. Using manufacturer's catalogs in sizing and matching system components and a study of control, refrigerants servicing methods is made. The American Standard Safety Code for Refrigeration is studied and its principles practiced. Prerequisite: AHR 1121.

AHR 1123 - Principles of Air Conditioning I

264

Work includes the selection of various heating, cooling, and ventilating systems, investigation and control of factors affecting air cleaning, movement, temperature and humidity. Use is made of psychometric charts in determining needs to produce optimum temperature and humidity control. Commercial air conditioning equipment is assembled and tested. Practical sizing and balancing of ductwork is performed as needed. Prerequisite: AHR 1122.

AHR 1124—Air Conditioning and Refrigeration

264 Servicing Emphasis is placed on the installation, maintenance and servicing of equipment used in the cleaning, changing, humidification and temperature control of air in an air conditioned space. Installation of various ducts and lines needed to connect various components is made. Shop work involves burner operation, controls, testing and adjusting of air conditioning and refrigeration equipment failure. Prerequisite: AHR 1123.

AHR 1126 - All Year Comfort System

264

Equipment used to provide heating and cooling for "all year" comfort will be studied. Included will be heat pumps, oil fired, gas fired, water circulating, electric-resistance and an introduction to solar heating and cooling systems. Specialized controls required for all year comfort systems, preventive maintenance, and balancing are included in the course.

AHR 1128 – Automatic Controls 2 6 4 Types of automatic controls and their function in air conditioning systems. Included in the course will be electric and pneumatic controls for domestic and commercial cooling and heating; zone controls, unit heater and ventilator controls, commercial fan systems controls, commercial refrigeration controls and radiant panel controls. Prerequisite: AHR 1126.

AHR 1130 – Year Around Duct System Design

This course will enable the Air Conditioning, Heating and Refrigeration student to design the necessary ductwork for residential and light commercial structures. Students will be able to also evaluate existing duct systems for adequate per-formance. This course is based on ACCA Manual D, D1 and D2 worksheets, thereby assuring a duct system design that will meet all code jurisdictions.

AHR 1131 – State Air Conditioning-Heating-Refrigeration Licensing Law 4 0

An in-depth study of the North Carolina Code for Heating, Air Conditioning and Refrigeration as set forth by General Statute 143-138(b). The purpose of the code, and the effect its provisions will impose upon the pertinent industry, will be covered by this course.

#### ART

ART 101—Art Appreciation 3 0 3 An introduction to fundamental elements and principles of creative art expression emphasizing composition, design, shape, value styles, and movement.

ART 102—Beginning Drawing 2 2 3 A general introduction for the beginning art student who wishes to develop an ability to create two-dimensional representational images in traditional drawing media.

ART 103 – American Art History 3 0 3 A study of the principal painters, sculptors, architects, and craftsmen in America from pre-Columbian time to the present and the work they produced, which greatly enhanced our cultural heritage.

ART 104 – Beginning Painting 2 2 3
This course is for students who have drawing experience and wish to advance to painting. Students will work with various media, exploring the techniques of each.

ART 105 – Western Civilization Art History 3 0 3

A survey of the history of visual art from ancient times to modern emphasizing the impact of masterpieces of painting, sculpture, and architecture on the past and the present.

ART 202—Advanced Drawing 2 2 3 A development of the basic skills acquired in Beginning Drawing or other art courses. Topics of study include still life, landscape, and figure drawing.

ART 203 – Painting Seminar 2 2 3
This course is designed for the student who desires further art experience after completing Beginning Painting. A variety of projects are covered in a group seminar setting.

ART 204 - Advanced Painting

Seminar 2 2 3
This course is for the advanced painting student who will be able to work independently on assigned art projects approved by the instructor. Students will develop new skills and utilize skills from previous courses.

ART 205 – Film Appreciation 3 0 3 An analysis of the creativity and special techniques that combine to represent the broad range of ideas and emotions of quality motion pictures.

ART 206—Elements of Film 3 0 3 A study of the pre-production, production, and post-production considerations (i.e., concept, manufacture, and sale) in the making of motion pictures.

# AUTO BODY REPAIR - AUTO MECHANICS

AUT 1101 – Internal Combustion Engines I 5 3 6

Development of a thorough knowledge and ability in using, maintaining and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operating of components of internal combustion engines. Testing of engine performance, servicing and maintaining of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems, proper lubrication and methods of testing, diagnosing, and repairing.

AUT 1102 - Engine Electrical Systems

5 3 6

A thorough study of the electrical systems in the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring.

AUT 1103 – Automotive Analyzing
Equipment 5 3 6

Development of a thorough knowledge of and ability to use engine analyzing equipment. The testing of the ignition systems, fuel system, exhaust, and emissions system.

AUT 1111 – Auto Body Repair I

264

Basic principles of automobile construction, design and manufacturing. A thorough study of angles, crown and forming of steel into complex contour of the present day vehicles. The student applies the basic principles of straightening, aligning and painting of damaged areas.

AUT 1112 – Auto Body Repair III 2 6 4

A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns and contours of the metal of the body and fenders. Metal working and painting.

AUT 1113 – Metal Finishing and Painting I 264 Development of the skill to shrink stretched metal, soldering and leading and preparation of the metal for painting. Straightening of doors, hoods and deck lids; fitting and aligning. Painting fenders and panels, spot repairs and complete vehicle painting; the use and application of power tools.

AUT 1114 - Body Shop Applications I General introduction and instruction in the automotive frame and front end suspension systems, the methods of operation and control and the safety of the vehicle. Unit job application covers straightening of frames and front wheel alignment. The student applies all phases of training: repair order writing,

and developing the final settlement with the adjuster.

AUT 1123 — Brakes 264 A complete study of various braking systems employed on automobiles and light trucks.

parts purchasing, estimates of damage

AUT 1221 - Front Alignment 264 Theory of operation, correct disassembly and mounting of all front suspension parts of various types of frames (car and light truck). A thorough understanding of the function and repair of steering gears (power and standard), shock absorbers, springs, wheels and tires, pumps, rams and other steering parts and accessories is gained. Theory and application of steering geometry, correct diagnosis of problems and use of the alignment and balancing machines; analysis and correction of tire wearing problems, vibrations, hard steering, pulling and other problems.

AUT 1227 - Power Accessories 1 3 2 This course will teach the student the principles and operations of the power accessories of the modern automobile. The student will study and repair the power accessory units such as power steering, power windows, power seats, power antennas, power headlights power tailgates, windshield wipers, and windshield washers.

AUT 1301 - Internal Combustion Engines II 264 A continuation of AUT 1101.

AUT 1302 - Fuel Systems 536 A thorough study of the fuel systems in the automobile, fuel pump carburetors and fuel injectors. The characteristics of fuel, type of fuel system, special tools, and testing equipment.

| AUT 1311 – Auto Body<br>Repair II                                       | 3 | 9 | 6 |
|---|---|---|---|
| A continuation of AUT 1111.   |   |   |   |
| AUT 1312 – Auto Body<br>Repair IV<br>A continuation of AUT 1112.        | 3 | 9 | 6 |
|   |   |   |   |
| AUT 1313 – Metal, Finishing and Painting II A continuation of AUT 1113. | 3 | 9 | 6 |
| A continuation of AUT 1113.   |   |   |   |
| AUT 1314 - Body Shop  |   |   |   |
| Applications II A continuation of AUT 1114.                             | 3 | 9 | 6 |
| A continuation of AUT 1114.   |   |   |   |

#### BIOLOGY

BIO 101 – Biology I - Principles of Biology An introduction to basic biological principles, including elementary chemistry, cell structure and function, genetics, molecular biology, ecology and evolution.

BIO 102 – Biology II - Zoology 324 A study of the animal kingdom including study of selected animals from each of the major groups. Emphasis is placed on the vertebrates.

BIO 103 - Biology III - Botany A survey of the plant kingdom including study of selected plants from each of the major groups, with emphasis on the seed plants.

BIO 107 – Anatomy and Physiology I 3204 A study of the structure and normal function of the human body with man identified as a living organism composed of living cells, tissues, organs, and systems. Included are the basic physiologic aspects of skin; the skeletal, articular, muscular, and nervous systems; and the special senses. A laboratory portion includes relevant experiments to augment the student's learning of body structure and functions.

BIO 108 – Anatomy and Physiology II A continuation of the study of the structure and normal function of man as a living organism. Special emphasis is on the circulatory, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive systems and fluid and electrolyte balance. Laboratory experiences included study of models and small animal dissection for insight into comparative

BIO 109 – Anatomy and Physiology III 3204 This course is the third in a sequential series of three courses on human physiological processes of the body systems. Prerequisites: BIO 107 and BIO 108.

structure and function of man. Prerequi-

site: BIO 107.

BIO 205 – Microbiology I A study of General Microbiology including identification, classification, morphology and culture methods of the representative groups.

BIO 206 – Microbiology II This course is the second in the sequential series of two courses. The focus of this study will be selected microorganisms; including bacteria, fungi, viruses, and protozoa, and the diseases or problems resulting from their growth and transmission. Prerequisite: BIO 205.

#### BOTANY

BOT 202 – Advanced Botany 324 A comprehensive study of the animal kingdom including anatomy, physiology, taxonomy, and ecology. Special emphasis will be placed on the higher plants. Prerequisites: BIO 101, 102, 103, or permission of instructor.

### BLUEPRINT READING

BPR 122-Industrial Drawing Drafting fundamentals and blueprints interpreting techniques common to commercial buildings covered from a safety technician's point of view. Schematics and diagrams to include electrical, plumbing, and heating installations using appropriate symbols and notes.

BPR 1001 - Blueprint Layout and Design 404

Building Trades-Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three views and pictorial sketches.

BPR 1104-Blueprint Reading: Mechanical

Mechanical-Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures, and notes.

BPR 1113 - Blueprint Reading: Electrical 404

Electrical-Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams and electrical plans for electrical installation using appropriate symbols and notes according to the applicable codes will be a part of this course.

BPR 1115 - Blueprint Reading: Plumbing

Sketching diagrams and schematics, and interpretation of blueprints applicable to the plumbing trades. Emphasis will be on plumbing plans for domestic and commercial buildings. Piping symbols, schematics, diagrams and notes will be studied in detail. Applicable building and plumbing codes will be used for reference.

BPR 1116-Blueprint Reading: Alr Conditioning 404

A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams, and schematics, floor plans, heating system plans including duct and equipment layout plans and shop sketches. The student will make tracings of floor plans and layout air conditioning.

BPR 1305 - Blueprint Reading for Machinist 404

Advanced blueprint reading as related to actual complete detailed drawings found in machine shops. Discussion as to how pieces will be produced and this relationship to the drawing.

#### BUSINESS

BUS 101 - Introduction to **Business** 

404

404

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organizations and management. Students learn the basic fundamentals of the free enterprise system.

BUS 109 - Business Math 404 This course stresses the fundamental operations and their application to business problems. Topics covered include: fractions, decimals, percents, ratios, payroll, interest, and installment buying. Prerequisite: MAT 100.

BUS 115 – Business Law I A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments and agencies.

BUS 116 - Business Law II 404 Includes the study of laws pertaining to bailments, sales risk-bearing, partnership-corporation, mortgages and property rights. Prerequisite: BUS 115.

BUS 117 - Personal Law 404 A general survey of law as it affects the individual citizen including the court system and protection of the individual's rights. Emphasis is placed on the Bill of Rights to the U.S. Constitution. Laws governing vehicle operation, domestic relations and consumer protection will also be covered.

BUS 123 - Business Finance I 404 Financing of business units, as individuals, partnerships, corporations and trusts. A detailed study is made of shortterm, long-term and consumer financing.

BUS 124 - Business Finance II 4 0 4 Financing federal, state and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies. Prerequisite: BUS 123.

#### BUS 204 - Business

Communications 404

Develops skills and techniques in writing and typing business communications. Emphasis is placed on writing and typing action-getting sales letters and prospectuses. Business reports, letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiry are covered in this course. Prerequisites: OSC 102 and ENG 130.

#### BUS 219 - Credit Procedures and Problems 404

Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection are included.

BUS 231 - Leadership Development 223

Leadership Development helps the student attain the personal attributes and managerial skills that foster success on the job. Case histories, self-assessment quizzes, and step-by-step guidelines build students' self-confidence while covering personality development, speech power, memory, creativity, creative selling, telephone technique, management and leadership, personal appearance, business and social success, and employment.

#### BUS 233 - Human Resources Management

Principles of organization and management of personal, procurement, place-

404

ment training, performance, checking, supervision, remuneration, labor relations, fringe benefits and security.

#### BUS 235 - Business

Management

404

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing and financing. Clarification of the decision-making function versus the operating function. Role of management in business qualifications and requirements.

BUS 271 – Office Management Presents the fundamental principles of office management. Emphasis is on the role of office management including its functions, office automation, planning, controlling, organizing, and actuating office problems.

#### BUS 287 - Small Business Management

404

"How to" introduction to the practices involved in small business operations. For business people who will one day find themselves financially able to start or buy a business; it provides an overview of the major problems they will face and the pitfalls they must avoid if success is to be assured.

#### BUS 290 – Personal Finance and Money Management 2 2 4

Personal finance and management presents an in-depth study of personal financial decisions the average person can expect to confront, including the basics of budgeting, the intricacies of home ownership, income tax, and investment, and the wise use of insurance. wills, and trusts.

#### CARPENTRY

CAR 1101 - Carpentry i

Carpentry I is a course designed to provide the student with the necessary skills to use power and hand tools safely and according to their recommended use. The student will also be able to correctly identify all power and hand tools relating to the field of carpentry. Lecture and shop will provide experience and knowledge in this course.

CAR 1102 - Carpentry III

Carpentry III is a course designed to enable a student to have competency in building floor systems of various types. The student will be able to correctly estimate and determine floor joist size. The student will learn the limitations of construction grade lumber and how to correctly size lumber for girders, headers and floor joists. Lecture and shop will provide experience and knowledge in this course.

CAR 1103 - Carpentry V 264

Carpentry V is a course designed to enable a student to have competency in building and framing roof structures. The various types of roofs will be covered, and the student will be able to identify each and have a general idea of how each is constructed. How to cut and figure rafters will be covered. Also, truss application will be covered.

264 CAR 1104 - Carpentry VII Carpentry VII is a course designed to give a student competency in finished carpentry in the interior of a structure. This course will cover interior wall finish and how to run moldings of various types. It will also include how to install various types of hardware (hinges, locks, hasps, rollers) and how to install cabinets and mechanical devices. Stairs and stairway construction will be a major part

#### CAR 1106-Construction Seminar 404

covered in this course.

Designed to survey current and new techniques in the construction field. This will be done through class research, demonstration, and lecture. Students will participate in all facets of the institutional process. Subject areas will be: innovations in the construction field, site layout, traditional techniques, materials and methods comparison, and approved areas for research such as solar energy and geothermal applications.

CAR 1301 - Carpentry II Carpentry II is a course designed to enable a student to properly lay-off and stake-out a house. Practice in site work (using a transit and builder's level) will be an important topic of study. Carpentry Il is a course designed to provide the student with the skills necessary to lay block and brick, to align and also to construct simple corners and foundation walls. Lecture and laboratory will be coordinated to provide development in this skilled area.

CAR 1302 - Carpentry IV Carpentry IV is a course designed to enable a student to have competency in constructing walls. Corner construction and partition intersection framing will enable the student to assemble all exterior and partitioned walls. The course will cover how to properly locate and frame all windows and door openings. Bracing of walls and preparing walls for rafters will also be covered.

CAR 1303 - Carpentry VI Carpentry VI is a course designed to enable a student to have competency in the exterior finish of a structure. Major things covered in this course will be: how to frame and finish overhang gutter work, door and window frames, wall coverings and trim.

CAR 1304 - Carpentry VII 264 Carpentry VIII is a course designed to give the student general knowledge and experience in cabinet work.

CAR 1305 - Building Code This Building Code is designed to give the student specific knowledge in residential building construction. The North Carolina Uniform Residential Building Code will be studied. Lecture will give the student knowledge and experience on how to use this book.

## MICROCOMPUTER SYSTEMS TECHNOLOGY

CAS 101 – Introduction to Computer Technology

An introductory course designed to acquaint the student with fundamentals of computers and computer processing. The course is appropriate for Microcomputer Systems Technology students as well as for students in other curriculums which require a computer literacy course. It is designed to help students understand how a computer works, its capabilities and its limitations. Computer terminology, computer hardware, microcomputer operations, and software applications will be emphasized. Prerequisite: none.

CAS 102 - Microcomputer

**Applications** A survey of things personal computers can do. The student learns how to interact with a computer while learning fundamental skills in several computer applications such as word processing, file management, and spreadsheets using integrated software. This course may be taken concurrently with CAS 101. Prerequisite: OSC 102 or demonstration of typing proficiency.

404

CAS 106—Word Processing I 324 An extensive course designed to teach computer users word processing skills using WordPerfect. Skills learned include creating, editing, saving and printing documents. Other topics are typing enhancement, multi-page documents, tabs, and block operations. Prerequisite: OSC 102 or demonstration of typing proficiency.

CAS 107 - Word Processing II 3 2 4 A continuation of CAS 106 using advanced concepts in WordPerfect, such as merging, graphics, sorting, envelopes, columnar text, tables, labels, and outlines. Prerequisite: CAS 106.

CAS 120 – Microcomputer Operating 324 Systems

This course is designed to acquaint the student with microcomputer operating systems. Emphasis is placed on controlling input and output, hard disk management, maintenance utilities, and software installation. Prerequisite: CAS 101.

CAS 130 – Microcomputer

Graphics Introductory course designed to acquaint the student with microcomputer graphic software capabilities. Students will use microcomputer graphics soft-ware to produce visual displays of processed data. Students will also learn to evaluate, select, maintain and utilize microcomputer graphic software. Prerequisite: CAS 101.

CAS 135 – Desktop Publishing 3 2 4 Using a microcomputer and desktop publishing software to assemble words and illustrations on a page will be studied in this course. The students will learn to produce attractive brochures, pam-phlets, manuals, newsletters, and other documents. Terminology and skills from printing and publishing, graphic arts, and computers are emphasized. Prerequisite: CAS 106

CAS 140 — Hardware

Maintenance and

Installation This course is designed to introduce the student to microcomputer hardware components. Topics include diagnostic testing procedures, installation of memory and peripherals, general maintenance and troubleshooting. Prerequisite: CAS 101.

CAS 150 — Integrated

324 Spreadsheets A course designed to teach users how to use an integrated spreadsheet. Learning will be facilitated through the solving of practical business problems in a "hands-on" environment.

CAS 151 — Advanced

Spreadsheets An advanced course in the utilization of integrated spreadsheet software. Emphasis will be placed on database functions, multi-level spreadsheets, input screens, advanced spreadsheet commands, and macro programming. Advanced commands and concepts will be taught through the use of realistic examples and practical lab applications. Prerequisite: CAS 150. CAS 160 – Windows This course is designed to familiarize the student with Windows' capabilities and uses. Topics include working in a graphical user interface environment, program and file management, accessories including Write and Paintbrush, printing, installing applications, and customiza-tion. Prerequisite: CAS 101 or CAS 102 or permission of instructor.

CAS 210 – Microcomputer

Office Systems 404 A study of the techniques utilized in the development of office automation systems. Emphasis is on organization concepts, skills, and procedures; capturing, storing and retrieving information; traditional and electronic information redecision making, sources, communication systems. Prerequisites: CAS 101, 106, 120, 210, 212, 240.

CAS 212 - DataBase

Management An introduction to using database management applications on personal computers. Creation, inquiry, updating and reporting are learned through business applications. The student will gain a working knowledge of database soft-

CAS 213 – Advanced DataBase Management

This class is designed to teach advanced concepts in database management. Students will gain understanding of programming concepts to allow customizing of whole multifile systems for use in business. Prerequisite: CAS 212.

CAS 230 — Data

Communications I This course is designed to introduce students to the concepts and technology of data communications in the context of computerized information systems. Includes a study of telecommunications, communications software, FAX, voice mail, and distributed data processing. Other topics include trends in applications and technology, and an overview of local area networks Prerequisites: CAS 120, or permission of

CAS 231 - Data

instructor.

Communications II This course is designed to introduce students to the concepts and technology of local area networks. Included are a study of the development of LAN's, LAN standards, and application processing. Other topics include choosing and evaluating LAN's network management, and security and reliability. Learning will be facilitated through using current LAN software in a "hands on" environment. Prerequisite: CAS 230.

#### CAS 240 - Automated

Accounting Systems 3 2 4
This course is designed to acquaint the student with integrated accounting software. Components include payroll, general ledger, inventory, billing, and other office functions. (Peachtree Accounting software will be used.) Prerequisite: ACC 120, ACC 121.

CAS 260 – Microcomputer Training and Support 4 0 4

This course is designed to introduce the student to training and support techniques. Writing and using documentation; selecting, learning, and teaching software packages; vendor resources; and adult education theory will be included. This course prepares the student to work with management and technical personnel responsible for information processing functions. Prerequisite: CAS 210, or permission of instructor.

CAS 270 – Microcomputer

System Project 7 6 4

This course is designed to provide the student an opportunity for applying office automation technology. The student will use the skills acquired in previous courses to design and implement an integrated office system. Prerequisite: Permission of instructor.

#### CHEMISTRY

102.

CHM 100 – Chemistry-An Introduction

to the health sciences.

An overview of chemical concepts and principles with emphasis on applications

CHM 101 – Chemistry I 3 2 4
Fundamental principles and laws underlying chemical action with special emphasis on the non-metals, their compounds, theories and problems. Laboratory deals with the non-metallic elements and their compounds, and the theories of qualitative and quantitative analysis. A working knowledge of algebra is highly recommended before entry into these courses which must be com-

CHM 102 – Chemistry II 3 2 4
A continuation of CHM 101. Prerequisite:
CHM 101.

pleted in sequence. Prerequisite: MAT

CHM 103 – Chemistry III 3 2 4 A continuation of CHM 101 and CHM 102. Prerequisite: CHM 102.

CHM 110-Introduction to

Organic Chemistry 3 2 4
Topics to be considered in this course
include nomenclature of basic families of
organic compounds — hydrocarbons
and function group — containing compounds. Synthesis of these families plus
representative chemical and physical
behaviors will be stressed. Selected topics such as isomerism and reaction
mechanisms will be discussed when appropriate. Laboratory experiences will involve application and illustrations of
basic organic synthesis techniques.

#### CRIMINAL JUSTICE

CJC 120 - Introduction to

Criminal Justice 5 0 0 5
This course is designed to familiarize students with the philosophy and history of criminal justice agencies, law enforcement, the courts, and corrections. Emphasis will be placed on the duties, responsibilities, and legal limitations of the various agencies. An overview of criminal justice as a career will also be examined.

CJC 121 – Criminology 5 0 0 5
This is a general course designed to provide students with an overview of the theoretical causation of crime and delinquency. Criminal behavior and society's reaction to it will be discussed.

CJC 122 – Substance Abuse 3 0 0 3
This course examines the development and history of substance abuse in the United States. Emphasis is placed upon identifying the characteristics of various drugs and drug abusers, contemporary health and social problems resulting from drug abuse, and the implications of substance abuse for the criminal justice community.

CJC 123-Juvenile Delinquency

5005

This course examines delinquency as an individual and a social problem. The theories of delinquency causation, the involvement of law enforcement personnel in the juvenile courts, current court procedures and policies pertaining to the handling of juveniles. The means of improving the relationship between the law enforcement officer and the juvenile offender.

CJC 124 – Criminal Law 5 0 0 5
This course includes a history of the development and philosophy of criminal law to include theoretical and practical application. Major crimes, as defined by the North Carolina General Statutes, will be examined. Prerequisite: CJC 121.

CJC 125 - Constitutional Law 5 0 0 5 This course will provide an examination of the United States Constitution and its importance to American jurisprudence. Legal decisions pertinent to contemporary law enforcement, courts, and correctional agencies will be studied. Included will be issues concerning the concepts of federalism, the right to privacy, and the protection of individual and civil rights.

CJC 126 - Community Relations and **Ethics** 5005

The course examines ethics as applicable to the criminal justice practitioner. Factors relating to effective community relations, law, psychological and social factors, minorities, social change, planning and community relations. General survey of municipal public relations and their effect on government process.

CJC 190 — Criminal

Investigations I 3003 This course introduces the student to fundamentals of investigation, crime scene search, recording, collection and preservation of evidence. Sources of information, interview and interrogation, case preparation, and court presentation will be discussed.

CJC 191 - Criminal

Investigations II 3003 A continuation of Criminal Investigations I with emphasis on specific offenses such as homicide, burglary, robbery, larceny, narcotics, arson, and sex crimes. Prerequisite: CJC 190.

CJC 192-Introduction to Criminalistics

Relationships of forensic science to criminal investigation and development of new laboratory techniques. Proper methods of processing the crime scene for physical evidence and the subsequent collection, presentation, and identification of evidence from the crime scene through introduction into court.

CJC 193 – Correctional Law Consideration of major legal issues pertaining to corrections, including sentencing, probation, restitution, prisons, parole, and restoration of rights. Emphasis is given to legal issues typically confronted by correctional administrators, probation/parole, and prison personnel.

CJC 231 - Introduction to Law Enforcement 5005

The principles of organization and administration of law enforcement, recruitment, selection, training, discipline and promotion; the functional division of the modern police department; and the future professionalism of the police services and patrol operations. Prerequisite: CJC 120.

CJC 232 - Crisis Intervention and Management 5005

This course introduces the student to theories and practices for the intervention, defusing, mediation, and referral of persons who are experiencing emotional, psychological, and relationship problems. Substance abuse and social and individual crisis situations are discussed, and the student is presented with methods and techniques for handling crisis situations. This is accomplished through lecture, demonstration, and practical exercises.

CJC 233—Introduction to Corrections 5005

This course examines a historical analvsis of correctional institutions and classifications. The present efforts to change offender behavior. Today's use of community-based corrections, institutional classification strategies, pre-release and temporary release programs. The innovative uses of probation and parole, and community residential programs.

CJC 234 — Criminal Justice Organization and Supervision 5005

This course is designed to prepare the new supervisor to effectively carry out his law enforcement responsibilities in areas such as management style, leadership, operations, personnel matters, and community relations. Prerequisite: Permission of instructor.

CJC 235 — Counseling 5005 The study of counseling from a criminal justice perspective. An examination of specific strategies and techniques designed to facilitate changed behavior. Emphasis on self-awareness and skills building.

CJC 236 - Security, Protection, and Loss Control 5005

This course introduces the student to the historical, philosophical, and legal bases of security, as well as to the fundamental principles of loss prevention to include all aspects of retail security protection. Internal safeguards including employee activities are also covered. The student will be prepared to analyze and comprehend special problems and practices of the security profession. Topics include preparation of a security survey of offices, schools, airports, etc; identification of problem areas and recommended procedures for safeguarding various facilities, preparation of procedures for security of transportation and cargo facilities.

# CJC 237—Seminar in Criminal Justice Issues 3 0 0 3

This course offers eighth quarter criminal justice students an opportunity to examine relevant and critical issues facing our society. A seminar format is utilized to encourage the critical analysis of information. Prerequisites: CJC 120 through CJC 231 inclusive.

CJC 290-293 – Work Experience: Internship or Free Elective (maximum of 3 hours credit) 0 10 0 1

This course offers eighth quarter criminal justice students an opportunity to experience the workplace of a local criminal justice agency and integrate concepts discussed in class into real-life situations. Students will be supervised by the Criminal Justice Department Chairman and agency staff. Students will complete a minimum of 10 contact hours per week. (10 clinical hours) Prerequisites: Consent of Criminal Justice Department Chair.

#### COSMETOLOGY

COS 1001 – Scientific Study I 7 15 12 Introduction to cosmetology basics, bacteriology, sanitation and their importance; shampoos, conditioner and proper draping of patrons; anatomy and physiology and their importance.

COS 1002 – Scientific Study II 7 0 7 Basic cosmetology chemistry and history of hair shaping, hairstyling, perming, relaxing, thermal curling and hair color; chemistry of make-up.

COS 1003 – Scientific Study III 7 0 7 Introduction to advanced cosmetology, theory of massage; electricity and light therapy; high frequency and methods of application; theory of perming; relaxing and hair coloring and lightening; the study of the hair and disorders of the scalp.

COS 1004 – Scientific Study IV 7 0 7 Introduction to business and North Carolina law as applied to cosmetology; the study of manicuring, nail diseases and disorders; in-depth study of the skin and its disorders.

COS 1011 – Clinical
Application I 0 18 6
Proper draphing, shampooing, rinsing and scalp examination on models; proper sanitation procedures and mannequin practice; the application of cos-

metics.

COS 1022 - Clinical

Application II 0 33 11
Hair shaping and thinning; hairstyling on
mannequins; proper sectioning for
perms; hair cuts; marcelling; color; practice in perm wrapping and thermal curling.

COS 1033 - Clinical

Application III 0 33 11
Massage application and procedures;
hair removal; ear piercing; light therapy
and electricity applications; color and
perming application and chemical relaxing procedures on live models or mannequins.

COS 1044 - Clinical

Application IV 0 33 11
Practical application of business and
North Carolina law pertaining to the operation of cosmetic art shops; manicuring; pedicuring; artificial nails and hand
and arm massage on models; the application of proper sanitation procedures.

#### DESIGN

DES 118 – Publications Design and Production I

A study of techniques and problems in the design and production of publications, including pamphlets, brochures, catalogues, and college yearbook.

DES 119 – Publications Design and Production II 2 2 3 A continuation of DES 118.

DES 120 – Publications Design and Production III 2 2 3 A continuation of DES 119.

DES 121 – Publications Design and Production IV 2 2 3 A continuation of DES 120.

#### DRAFTING

DFT 110—Introduction to Drafting

In this course, the student will learn to organize for presentation on prints mechanical, architectural, and geographic information. This information will be presented through use of orthographics, isometrics, sectional drawings, demensioning, notes and lettering. The course emphasis will be on the general presentation of this information as applied to different areas of drafting and drawing. The student will develop these skills through actual practice with the most common drawing tools.

#### DRAMA

DRA 105-Theatrical

Performance 223 Designed to give the student experience in an appreciation of a variety of behindthe-scenes and on-stage procedures that are requisite to a theatrical produc-

DRA 106 - Dramatic

Production 223 Designed to give the student further experience in theatrical productions with emphasis placed on technical theatre.

DRA 107-Theatre

Appreciation A general survey of theatre history including an investigation of the origins of tragedy and comedy. A study of medieval church drama, Shakespeare, the Renaissance and the Romantic traditions, Isben and realism. Theatre of the Absurd and some of its more recent descendants. Appropriate selections from the literature of some of the above-mentioned periods will be included.

DRA 200 - Creative Dramatics A course designed for teachers and other youth leaders who wish to use creative dramatics as a teaching tool. Different types of creative communication appropriate for children and adolescents will be studied. Major topics are Creative Theatre, Formal Theatre, and Oral Interpretation. Projects will include selected readings, improvisations, and skits.

DRA 202 - Musical Theatre 303 The study of musical theatre—its origins, history, etc. Participation in musical skits will be encouraged.

DRA 208 - Children's Theatre 303 This course introduces the student to the different types of theatre appropriate for children. These types include, but are not limited to, Reader's Theatre, Mime, Creative Dramatics, Story Theatre, and Presentation Theatre. A course requirement will be the actual selection, rehearsal and presentation of a mini production for children by adults and/or a production by children.

#### **ECONOMICS**

ECO 102 - Economics I 505 The fundamental principles of economics including the institutions and practice by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution and consumption both in relation to the individual enterprises and to society at large.

ECO 104 - Economics II 505 Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade of finance and economic problems.

ECO 201 - Labor Economics Emphasis is placed on the history of the labor movements in the United States, the development of methods and strategies by labor organizations and by management, the shift in the means of public control, and the factors on income and economic security.

#### **EDUCATION**

EDU 100-Writing Across the Curriculum 101

The study of writing in the subject matter areas, a survey of writing across the curriculum programs, including their content, design, teaching strategies and evaluation.

EDU 103 – Social and Psychological Development of the Child: A Contemporary Study

A study of child development for preschool and kindergarten teachers, family care providers, child care center staff, and parents. Includes practical strategies to improve the quality of life for children between birth and age 6 to ensure emotional, physical, and intellectual wellbeing. Provides valuable child development background for teachers of the older elementary-school child.

EDU 121 — Effective Teaching Strategies 303

Emphasis is placed on learning effective teaching techniques to enhance expertise as an instructor. Practical examples will be studied with use of videotaping to evaluate organization, techniques, and behavior.

EDU 151 - Creative Art for Children

A study of art for the elementary grades with concentration on theory, media, methods and creative art activities appropriate for the young child.

EDU 201 - Teaching for 303 Thinking

A multidisciplinary course designed to help teachers help their students learn to think for themselves. Techniques and strategies for creating situations in which students must organize, analyze, synthesize, evaluate, guess, imagine, classify, and interpret are demonstrated.

#### EDU 202 - Reading In the **Content Areas**

303

This course, which provides instruction in the teaching of reading in the content areas (such as history, science, social studies) is designed for classroom teachers who teach at the junior high, senior high, and adult level. Basic theories and their practical application to teaching are emphasized. Topics include formal testing, textbook selection, making effective reading assignments, teaching students how to study, and designing strategies for presenting textbook content to students.

#### ELECTRICITY

#### **ELC 115-Rotary Machines** and Controls

Concepts of motor construction, power requirements, mechanical aspects of electric motors, including DC and stepping motors, and single and multiphase AC motors. The course includes wiring, testing, starting, reversing, and speed control of various types of motors. Motor control circuits include electro-mechanical and solid-state devices and times or sequencing switches. Information also aids in proper choice of motor types for specific applications.

#### ELC 1102 - Basic Electricity for Air Conditioning, Heating, and 264 Refrigeration

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installations. Electrical principles and procedures for trouble-shooting of the various electrical devices used in air conditioning, heating and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

#### ELC 1111 - Basic Electrical Circuits, Machines, and Transformers I 435

A student will gain competency in construction and using series and parallel circuits. Single and polyphase rotating machinery, transformers and transformer connections will also be studied. A large portion of lab time will be used to build competency in understanding and practical application of these circuits and machines.

#### ELC 1113 - Alternating Current and Direct Current Machines and Controls

This course is designed to build competency in the area of magnetic motor controls. Basic start-stop-job circuits and their many variations as well as limiting devices in these circuits will be studied in detail. Large portions of lab time will be spent in developing competency in the use of the circuits as they apply to industry.

#### ELC 1114 - National Electrical Code

404

264

A study of the National Electrical Code in preparation for the licensing examination. Instruction will include the latest code revisions, safety measures and standard practices in the wiring of single and multifamily dwellings, commercial establishments and industrial locations.

#### ELC 1124 - Residential Wirlna I

264

Provides instruction and application in the fundamentals of blueprint reading, planning, layout and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Codes regulators in actual building mock-ups.

#### ELC 1125 - Commercial and Industrial Wiring I

264

Layout, planning and installation of wiring systems in commercials and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring conduit preparation and installation of simple systems.

#### ELC 1311 - Basic Electrical Circuits, Machines, and Transformers II 435

A continuation of ELC 1111.

#### ELC 1313-AC/DC Machines and Controls II 264

A continuation of ELC 1113.

### ELC 1324 - Residential Wiring II

A continuation of ELC 1124.

#### ELC 1325 - Commercial and Industrial Wiring II 264

A continuation of ELC 1125.

#### **ELECTRONICS**

ELN 100-Introduction to 404 Electronics

A survey of electronics with particular attention to what electronics consist of. A non-mathematical approach will be utilized in this course. Students also learn the magnitude of the Electronics Engineering Technology degree requirements.

ELN 103 - Circuit Layout and Design 324

The fundamentals of drafting are presented with an emphasis on applications in the electronics field. Basic skills and techniques are included such as the use of drafting instruments, types of drawings, construction of drawings both with instruments and freehand, lettering and dimensioning, and how to read prints. In addition to basic skills, specialized experience will be included which directly relates to the electronics industry, such as types of drawings common to electronics, special symbols used, schematic diagrams, and layout diagrams with an emphasis on printed circuit work.

ELN 112-Electronics Fundamentals I 324

Presents fundamental principles of Direct Current electricity including: units of measurement, OHM's law, Kirchoff's laws, simple parallel, and series parallel resistive circuits, R-C & L-R circuits, power resistance, current capacitance, magnetism, and basic circuit components. Lab work will cover the proper use and care of hand tools, and measuring equipment such as the VOM and VTM. Interpretation of schematic diagrams and component identification, and verification of basic electrical laws will be included.

ELN 113 - Electronics

Fundamentals II 324

Presents fundamental principles of alternating current electricity including: resistive, capacitive, and inductive circuits, impedance, phase relationships, resonant and nonresonant series and parallel LRC circuits, inductive coupling, and air and iron care transformers concepts. Lab work will include use of the DVM and oscilloscope, and verification of basic electrical laws. Prerequisites: ELN 112, MAT 101.

ELN 114-Active Devices

Covers basics of vacuum tubes and solid state devices including: transistors, diodes, photocells, and thermistors. Lab experiments will verify the function of these components in circuits. Prerequisites: ELN 113, MAT 102.

ELN 121 - Electronic Circuits I

324

Covers the building blocks of electronics such as: power supplies, amplifiers, oscillators, feedback circuits, and tuned circuits. Lab work will give experience in building and troubleshooting these circuits. Prerequisite: ELN 113.

ELN 122 - Electronic Circuits II

3 2 4

Allows the student to study the relationships of the circuits covered in ELN 121. Discussion will center around the networks formed by interconnection of these circuits. Prerequisite: ELN 121.

ELN 123-Introduction to Microprocessors

324 A study of the computer in its smallest physical form. The student will be given practice in BASIC programming and the utilization of the microprocessor in manufacturing situations.

ELN 208 - Industrial **Electronics** 

324 Electronics as applied in industrial control and production systems: study includes types of components and circuits used to control processes and equip-ment such as DC motors, drives, switching, and control processes and equipment and its installation and safety considerations. Includes the study of circuits used in sensing and control as well as monitoring manufacturing processes.

ELN 218 – Logic Fundamentals 3 2 4 Covers basic logic circuit design and application including: OR gates, AND gates, NOR gates, NAND gates, binary numbering systems and Boolean Alge-

ELN 219 - Pulse and Logic Circuits

3 2 4

This course continues the study of topics covered in ELN 218 and introduces bistable and monostable multivibrators, integrators, Schmit trigger circuits, and transistor switches. Prerequisite: ELN

ELN 235 - Industrial

Instrumentation 324

Principles of measurement of electrical values and other parameters for use in the automatic control of machinery and equipment are covered. Electronic circuits necessary for the processing of information and display are investigated. Several types of transducers for the detection and conversion of various parameters are studied and their interfacing with indicators and other systems are discussed.

ELN 242 – Electronic Systems I 3 2 4

Study of Motorola 6800 series machine language instruction set. This course will cover most of the 72 types of instruction that make up the 6800's instructions set. An assembler will be used to convert programs from assembly language to machine code. Prerequisite: ELN 123.

ELN 243 - Electronic Systems II

3 2 4

Covers microprocessor applications and interfacing. Discussion of Basic Input/ Outputs, serial and parallel data communication, and Analog to Digital and Digital to Analog Conversions. Prerequisite: ELN 242.

ELN 246 – Electronic Systems Project

3 2 4

A class emphasizing independent research and design work by the student. The student will select a project in consultation with the instructor; perform the required research; compile data; formulate a theoretical model; and construct, test, and evaluate a working model of the selected project.

## ELN 249 – Electronic Technique and Problem Solving

324

ELN 249 is primarily a "hands-on" course to give the student the opportunity to gain proficiency with tools of the trade by project design, layout, drilling, cutting, fastening and soldering as they carry out assignments from the instructor. The student also gains knowledge of procedures used in problem solving by application of previously learned material as well as troubleshooting procedures for many systems. The course objective is to prepare the student for work-bench applications of electronics and the use of various hand and power tools.

ELN 251 – Programmable Logic Controller Programming and Application 3 2 4

This course introduces the student to Programmable Logic Controllers (PLC's) and their application in industry. Topics include selection and installation, boolean programming, ladder programming, I/O characteristics, latch circuits, master control relays, timers and counters, sequencer programming, and trouble-shooting. Laboratory exercises include PIC logic and I/O configurations, programming techniques, program de-bugging, and system troubleshooting. Prerequisites: ELC 1113 and/or ELN 115.

ELN 252 – Intermediate
Programmable Controller
Programming and

Application 3 2 4
This course deals with some of the more advanced features of Programmable Logic Controllers (PLC's). Topics include sensors, analog I/O, multiple PLC systems, advanced sequencer applications, shift register applications, advanced programming techniques, basic math functions, data manipulation, and basic peripheral applications. The student will also learn about bus configurations, memory organization, and register functions. Laboratory exercises will include sensors, multiple PIC systems, and associated peripheral devices. Prerequisites: ELC 1113 or ELN 115, and ELN 251. (Equivalent industrial experience may be substituted with instructor/advisor approval.)

ELN 1103—Solid State Devices 4 0 4 Basic principals of solid state devices as found in industry. The course focuses on understanding the different symbols and a fundamental understanding of solid state device operations. Prerequisite: ELC 1111 or experience.

#### **ENGLISH**

ENG 100 – Basic English Skills

303

A review of basic English skills which will prepare students for the competencies needed in English 130 and 131. Course content includes a study of major structural errors, grammar, mechanics, punctuation, spelling and study skills. This is a developmental course which will not count for credit toward any degree/diploma or certificate program.

ENG 103—Report Writing 3 0 3 A study of standard English and the organization and techniques of modern report writing. Exercises in developing typical reports using writing techniques and graphic devices. Special emphasis on practical application of occupational writing demands.

ENG 105 – Masterpieces of World Literature

World Literature 3 0 3 A study of novels, short stories, poetry, plays, and non-fiction representative of both classic and contemporary world lit-

erature.

ENG 130 – English Grammar and Composition

and Composition 3 0 3 A study of English grammar, usage in punctuation, mechanics, and basic library skills. Special emphasis on the writing process and the development of the paragraph and the essay. Includes a library orientation program for new users, with special attention to individual bibliographic assistance and the use of bibliographic and other library materials.

#### ENG 131 - Composition, and Introduction to Literature

A continuation of ENG 130 with special emphasis on the development of interpretive essays on thematic and structural topics in four genres: poetry, short story, drama, and the essay. Prerequisite: ENG 130.

303

#### ENG 132 - Composition, Research, and Documentation 3 0 3

A study of research in the college library including the card catalog. Reader's Guide to Periodical Literature, and bibliographic resources. Emphasis on the development of the research paper, including notetaking, paraphrasing, and documentation. Prerequisite: ENG 131.

#### ENG 133 - Advanced Composition, Research, and Documentation 303

Advanced study of research methods, documentation, and use of the college library. Required research papers include topics on selected works of literaand non-literary topics. Prerequisites: ENG 130, 131, and 132.

## ENG 200 — Storytelling

A course designed to motivate students to collect and record stories and legends from both written and oral sources. In addition, students will learn effective storytelling techniques through model presentations and from sharing their own work. Topics of study include sources for stories, types of stories, and effective storytelling techniques.

#### ENG 201 - English Literature Survey 303

English 201 is a study of selected works of major British writers, including discussion of the milieu in which they wrote. Students papers analyze and criticize authors and their work. ENG 201 covers major British writers beginning with Chaucer and continuing through the twentieth century. Prerequisite: ENG 131 or advisor approval.

#### ENG 203—Creative Writing 303 Creative writing laboratory. Emphasis on imaginative writing with special emphasis on essays, short stories and poetry. Prerequisite: ENG 130.

#### ENG 205 - Major American Writers

303

A study of major American authors representative of literary movements from Romanticism to the present.

#### ENG 207 - Southern American Writers 303

A study of principal authors, from colonial times to the present, who have made a contribution to a better understanding of the people and institutions of the South.

#### ENG 209 - Creative Writing Workshop

303

Continuation of ENG 203 - Creative Writing is a didactic course. Creative Writing Workshop will be responsible for all phases of the publication of the literary magazine Foothill Notes; i.e., writing, editing, typing, distributing, etc.

#### ENG 210 -- Effective Communication

303

A course designed to help participants understand their own communication problems, overcome or prevent communication breakdowns, and improve their relationships with others through more effective listening and speaking skills.

#### ENG 216 - Walden by Henry David Thoreau

A course designed to familiarize students with Thoreau's Walden. This book will be read and discussed in a seminar setting. Thoreau's life will also be discussed.

## ENG 217 - The Poetry of Robert Frost

A course designed to familiarize students with the poetry of Robert Frost. Appropriate selections will be read and discussed in a seminar setting. Frost's life will also be discussed.

#### ENG 218-Children's Literature

303

This course is a critical study of those books, both classical and current which are appropriate for the varying needs and developmental stages of children from kindergarten through the ninth arade.

#### ENG 221 - American Literature Survey I

303

303

From the foundations of the republic to the late 19th Century, emphasizing distinctive lines of thought.

#### ENG 222 – American Literature Survey II

From naturalism to the present, emphasizing the tension between romantic and neoclassical principles.

# ENG 1102 - Communication

404

Explains topics in oral and written communication, including the communicaprocess, listening, presentations, non-verbal communications, participation in meetings, writing the letter of application and accompanying resume, and special problems in English grammar and usage. Includes a library orientation program for new users, with special attention to individual assistance for finding materials and using bibliographic and other library materials.

#### ENVIRONMENTAL

ENV 206 - Environmental Law 404 A study of local, state, and federal laws and acts concerning environmental quality standards and the use of resources, legal procedure for enforcing laws, and problems concerning enforcement. Included will be environmental standards dealing with polluting sources such as industry, agriculture, municipalities, and individuals.

#### FOOD SERVICE

FSO 1102 - Food Preparation 264 and Baking I

A study of the scientific principles of baking, food preparation, and cooking procedures; included will be preparation of salads, stocks, sauces, breads, desserts, and beverages.

#### FSO 1103 - Sanitation-Safety 404 Equipment

A study of sanitation standards and safety precautions as related to food storage, preparation, and service. The student will also learn the design, methods and care of kitchen equipment.

FSO 1105 - Purchasing To indicate the functions and administrative operations of the food purchaser's department. Methods and procedures for purchasing foods, standards, grading, and inspecting those items bought. Also, the student will learn how items are to be received, stored, and issued.

FSO 1106 – Menu Planning This course will demonstrate a study of composing a menu. It will reflect the seasonable changes necessary in menu planning, the essential human food requirements and the types of food that produce these requirements.

#### FSO 1108 - Personnel

Management 202

A study of the job responsibilities and duties of the food service worker; his relationship to his associates, with emphasis on understanding human behavior, labor policies and legislation, and the importance of self-development in relation to professional responsibility.

## FSO 1109 – Production

Management 202 Use of standardized recipes and portion

control, work sheets, score sheets for judging food products, plan of work to improve work methods and further emphasis on motion economy.

FSO 1112 - Food Preparation

and Baking III This course will develop artistic skills related to cooking and baking. The course will introduce more detailed assignments in the practical shop work to achieve increased skills. The student will learn the principles and preparation of egg cookery. All breakfast preparation will be taught.

FSO 1116-Baking V 2 6 4 A continuation of FSO 1312-Food Preparation and Baking IV.

#### FSO 1122 - Food

Preparation V A continuation of FSO 1312-Food Preparation and Baking IV.

FSO 1302 - Food Preparation and Baking II

This course is primarily designed to teach the students the different cuts of meats and their respective cooking methods. Fish, seafood, and poultry will also be stressed. The student will also be required to expand his knowledge in breads, cakes, pies, and other desserts.

FSO 1312 – Food Preparation

and Baking IV 264 A continuation of FSO 1112-Food

Preparation and Baking III.

FSO 1316 – Baking VI 2 6 4 A continuation of FSO 1116 – Baking V.

FSO 1322 - Food

Preparation VI A continuation of FSO 1122 - Food Preparation V.

#### HISTORY

HIS 101 – World Civilization I A survey of the cultural beginning of Eastern and Western civilizations, dealing with migrations, cultural diffusion, and the development of governmental and ethical structures through the fall of the Roman Empire.

HIS 102-World Civilization II A continuation of HIS 101 from the Middle Ages, through the Renaissance, the Voyages of Discovery, Colonization, the Reformation and the Age of Enlightenment.

HIS 103 - World Civilization III A continuation beginning with the Industrial Revolution, the impact of industrial imperialism, the American and French Revolutions; the rise of political democracy and modern nationalism to the present.

HIS 110 – American History I 303 A comprehensive survey of American History from colonial times through the Civil War. It is a study of the political and social history of a pluralistic society with emphasis upon manners, mores, literary and artistic movement, religions and philosophical schools of thought, and the general outlook of the American people on particular subjects.

HIS 111 - American History II 303 A continuation of American History I, beginning with the reconstruction period after the Civil War and proceeding through history up to the present.

HIS 112 – American History III A continuation of American History I and American History II. An in-depth study of the United States Supreme Court Justices and landmark decisions, especially those decisions affecting educational institutions.

#### HUMANITIES

HUM 101 - Dimensions of Human Experience

An interdisciplinary course in the humanities emphasizing some of the major dimensions of human experience, as reflected in philosophy, art, literature, music, history, religion, and psychology.

HUM 110—History of Dress A study of the costumes of the ancient world. Europe and American and the effects of the social environment upon appearance and evolution of garments with special emphasis on the influence of history on modern concepts of dress.

HUM 113 - Professional

Imaging 404 This course stresses the individual development of the student's potential in enhancing and training mind and body in the following areas: self-esteem and personality, physical conditioning, nutrition and diet, clothing and appearance, habits or orderliness, overall grooming, graciousness, manners, and consumer awareness.

#### HYDRAULICS

HYD 1105 – Hydraulic Fundamentals

404

An introduction to basic hydraulic principles including Pascal's Principles of static fluids, Berboulli's theorem of fluids in motion, viscosity, laminar and turbulent flow, Reynolds' number, dynamic similitude, velocity gradient, etc.

#### INDUSTRIAL MANAGEMENT

ISC 107 – Occupational Safety and Health Act

A survey of the Williams-Steiger Occupational Safety and Health Act of 1970. Application of the Federal Standards in various industries.

ISC 120 - Principles of Industrial Management I 404

The basic managerial decisions; organizational structure including plant location, building requirements, and internal factory organization; problems of factory organization and control, planning, scheduling, routing factory production, and labor control.

ISC 121 - Principles of Industrial Management II

A continuation of Principles of Industrial Management I. Prerequisite: ISC 120.

ISC 209 — Plant Layout

A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Layouts for small and medium-size plant, layout fundamentals, selection of production equipment and materials handling equipment. Effective management of men, money, and materials in a manufacturing operation.

ISC 211-Work Measurement 404 Principles of work simplification including administration of job methods improvement, motion study fundamentals and time study techniques, use of flow and process charts; multiple activity charts, operation charts, flow diagrams and methods of evaluation are studied.

ISC 213-Production Planning I

Day to day plant direction; forecasting, product planning and control, scheduling, dispatching, work loading. Routing and inventory control are studied.

#### ISC 214 - Production Planning II

The primary emphasis in this unit of study will be on the following: Resource procurement and operations control; project scheduling and resource allocation, development of efficient work methods, work measurement techniques, employee motivation, and quality assurance. Prerequisite: ISC 213.

404

ISC 218 - Plant Security 404 Survey of the organization and function of the plant security force. Items stressed include: entrance procedures, petty thievery of company owned materials, parking lot security, use of fire arms in an emergency situation, disaster preparedness, and handling of bomb scares.

#### ISC 220 - Management **Problems**

A study of personnel and production problems from the standpoint of middle management. Includes selection and development of products, control problems and techniques, development of standards, employer-employee relations. Case studies are extensively utilized.

#### ISC 224—Elements of Industrial Hyglene 404

Course designed to develop understanding of broad concepts of industrial hygiene and to develop ability to recognize potentially hazardous environmental conditions. A survey of the effects of toxic agents on the body and general methods of control will be included.

ISC 243 - Free Enterprise An in-depth examination of the component parts of the free market, capitalism and the complex interaction of producer, consumer and government. The fundamental principles which have contributed so vitally to the economic and industrial preeminence of the United States are employed. Some of these are relying on industry keeping government in its place, and the encouragement of productivity and ingenuity by the worker.

#### ISC 250 - Statistical Process Control

This course is designed to introduce the student to the fundamentals of Statistical Process Control in manufacturing management. It acquaints the student with terms, symbols, charts, math and graphics necessary to accomplish implementation of a control program using this concept. Prerequisite: MAT 117 or equivalent.

#### ISC 251 - Intermediate Statistical Control

This course is designed to identify a problem and a process in industry, analyze causes, collect data, analyze data, implement corrective action and monitor process control. This is achieved through learning to use the following control charts: Run Chart, XBar Chart, R Chart, S Chart, Moving Range Chart, X Bar-R Chart, X Bar-S Chart, X Moving Range Chart, P Chart, PN Chart, C Chart, U Chart, Bar Chart, Pareto Diagram, Pie Chart, Table, Histogram (Frequency Dist), Frequency Polygon, Ogive (CDF), Scatter Diagram. Prerequisite: ISC 250.

#### ISC 1101 - General Industrial Survey

This course will cover a wide variety of industrial processes, from conception to final production. It includes processes in graphics, wood industries, plastic and metal industry.

#### **JOURNALISM**

JOU 116 – Journalism I 303 A study of journalistic writing with special emphasis on collection, writing, and editing news stories; a study of freedom of the press and basic news legality. Practical application of newswriting through the development of the college newspaper.

JOU 117 - Journalism !! A continuation of JOU 116. 303

#### MATHEMATICS

#### MAT 100 - Basic Arithmetic Skills

404

A review course in the principles and manipulations of arithmetic operations. Topics of study include: whole numbers, common fractions, decimals, percent, ratio and proportion. This is a developmental course which will not count for credit toward any degree, diploma or certificate program.

#### MAT 101 - Principles of **Mathematics**

A course emphasizing applications of mathematics and geometry. Topics of study include: a brief review of the basic operations, business applications, statistics, measurement, geometry, and integers. Prerequisite: MAT 100 or equivalent.

#### MAT 102-Introduction to Algebra

404 An introductory course acquainting students with the basic principles of the study and application of algebra. Topics of study include: The equation, signed numbers, monomials, polynomials, graphing and set theory. Prerequisite: MAT 101 or equivalent.

MAT 106 - Math for

Pharmacology 303 A course designed to review the basic mathematics needed for Pharmacology. The course will also include work in the various measurement systems and conversion between the systems. The course is designed for students who are planning to enter an LPN or RN program.

MAT 118 — Statistics An elementary course concerning the basic concepts of probability theory and the methods of statistical inference. Topics are to include: probability, descriptive statistics, sampling, normal and binomial distributations, sampling distributations. Prerequisites: MAT 102 or high school algebra.

MAT 121 – College Algebra I 303 A study of the manipulation of polynomials, rational expressions, and solutions of equations. Topics of study to include: Linear equations, inequalities, exponents, polynomials, rational expressions, powers, roots, radicals, quadratics, and logarithmic functions. Prerequisite: High School Algebra or MAT 102.

MAT 122 - College Algebra II 303 A study of the solution of equations and systems of equations through advanced algebraic techniques. Outline of study includes: functions, graphing, operations with polynomials, solution of quadratics, linear equations, inequalities, matrices, determinants and exponential and logarithmic functions. Prerequisite: MAT 121.

MAT 123 - Trigonometry An intermediate course in the principles and applications of trigonometric functions and algebraic manipulations of trigonometric functions. Outline of study includes: trigonometric functions, solution of triangles, radian measure, trigonidentities and inverse trigonometric functions. Prerequisite: MAT 102 or equivalent.

MAT 201 - Differential

Calculus 505 A course in the principles, concepts, and applications of differential calculus. Outline of study includes: limits, continuity, derivation, and application of the derivative. Prerequisite: MAT 121, 122, 123 or equivalent.

MAT 202 - Integral Calculus The study of the properties and applications of integral calculus with emphasis on: vectors and solid analytical geometry, partial differentiation, multiple integral and vectors and solid analytical geometry, partial differentiation, multiple integral and vector calculus. Prerequisite: MAT 201 or equivalent.

MAT 203 - Calculus and Analytic Geometry

The study of the properties and application of the derivative with emphasis on: conic sections, transcendental function, exponential and logarithmic functions. Prerequisite: MAT 202.

MAT 206 - Calculus for Business 5 0 5 A one-quarter course which is to cover both differential and integral calculus. This course will use the intuitive approach, with theory applied where necessary. A major aim will be to show application of the tools of calculus. Recommended prerequisites: MAT 121, 122, 123.

### MAT 1101 - Vocational Basic Arithmetic

A self-paced study of arithmetic skills which may be applied in the vocational areas of study. Topics of study include: whole numbers, decimals, fractions, ratios, proportions, percent and measurement.

MAT 1102 - Food Service Math 4 0 4 This course focuses on the essentials of mathematics required in the food service industry. Topics covered include arithmetic operations with whole numbers, rational numbers, decimals, and percentages. Fundamental principles of business mathematics are used in practical problems of food industry.

MAT 1103 - Applied Math: Geometry

An exploration of the fundamental properties of plane and solid geometric figures encountered in machine shop processes and other trades.

MAT 1104 – Applied Math:

Trigonometry 404 Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; in-

verse functions, trigonometric equation. All topics are applied to practical problems.

MAT 1110 - Electrical **Mathematics** 404

A course in algebraic and trigonometric processes involved in theoretical and applied electronics. Topics of study include: factoring roots, use of calculator, electrical equations, electrical units; fractional equations, polynomials, simultaneous equations of two unknown and trigonometric functions.

MAT 1112 - Construction

Estimating 404

Construction Estimating is a course designed to give a student specific knowledge in estimating the various phases of a residence or small structure. Quantity takeoff will be taught. Estimating will be a major part of the course. Competency will come with many hours of practice.

#### MACHINE SHOP

MEC 1101 - Machine Shop Theory and

264

Practices I An introduction to the machinist trade and the potential it holds for the craftsman. Deals primarily with the identification, care and use of basic hand tools and precision measuring tools.

MEC 1102 – Machine Shop Theory and

264

Practices III Advanced operations in layout tools and procedures, surface grinding, milling machines, lathe, and planer will be taught in this course. The students will also be doing projects showing proper sets and machine operation.

MEC 1103 - Machine Shop Theory and

**Practices V** 264

Advanced work on the engine lathe, turning, boring and threading machine and shaper will be dealt with in this course. The student will be introduced to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels.

MEC 1104 – Machine Shop Theory and

Practices VII 264

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, advanced milling machine operations, etc.

MEC 1105 - Introduction to the **CNC** Lathe and Mill

The student will be oriented to the CNC lathe and mill, tooling safety and basic programming. The student will be instructed in the math and blueprint reading needed to program and operate the CNC lathe and mill.

MEC 1106 – Programming the **CNC** Lathe

An advanced programming course for CNC lathe. As a continuation of MEC 1105, this course will give students advanced training in machine set-up and tooling for CNC. Students will write their own programs, choose tooling, set-up and run the lathe with their programs.

MEC 1107 – Programming the CNC MIII 404

An advanced programming course for the CNC lathe. As a continuation of MEC 1105, this course will give students advanced training in machine set-up and tooling for CNC. Students will write their own programs, choose tooling, set-up and run the lathe with their programs.

MEC 1199 – Automotive Machine Shop

This course is designed for the student to gain competency in machine shop processes related to the automotive industry. Such processes include the use of the brake drum lathe, valve grinding equipment, precision measure and use of the boring bar.

MEC 1301 — Machine Shop Theory and

Practices II

Layout procedure and processes of the power cut-off saw, band saw, drill press, milling machine, lathe, and off hand grinding will be introduced both in theory and practice.

MEC 1302 - Machine Shop Theory and

**Practices IV** 

The student will be introduced to operations involved in cylindrical, cutter and internal cylindrical grinding. Projects will be selected encompassing proper setups and machine operations.

MEC 1303 – Machine Shop Theory and

**Practices VI** 264

The trainee will use precision tools and measuring instruments such as the vernier height gages, protractors, comparators, etc. Basic exercises will be given on the turret lathe and on the tool and cutter guide.

404

## MEC 1304 - Machine Shop Theory and

Practices VIII Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry.

## DISTRIBUTION AND MARKETING

MKT 101 – Principles of Fashion Merchandising

This course is designed as an introduction to fashion terminology and the components of fashion. It explores the manner in which economic, sociological, and psychological factors influence fashion demand. A brief history of fashion is discussed along with the roles and responsibilities of designers, manufacturers, and retailers. Great emphasis is also placed on careers in fashion.

MKT 102 - Modeling and Social

Usage This course is designed as an introduction to the techniques and skills needed to improve one's stance, posture, car-riage and body control and business manners in order that each student can better meet the requirements they will face in the business world.

MKT 103 - Fashion

Accessories 404 Concerns itself with properties, characteristics, and construction of leathers, fur, hosiery, intimate apparel, belts, umbrellas, millinery, wigs, jewelry, and cos-metics as they affect the knowledgeable buying and selling of these products.

MKT 104 - Fashion Sketching To help students develop fashion sketching techniques for promotion designs which are already complete, for illustrations in magazines, newspapers, poster design, display, etc. Enables students to acquire knowledge of figure proportions.

MKT 106 - Fabric Science 404 Analyzes textile fibers and the construction of fabrics, with emphasis on the properties that affect their hand, appearance, performance and end use.

MKT 208 - Fashion

Salesmanship 404 This course will analyze the basics and nature of selling. The course will study the consumer buying habit, behavior and communications process. A thorough study of the importance of personal selling to our socioeconomic system, the way culture influences the behavior of buyers, background information for identifying prospects, and characteristics for special types of selling and the building of a sales force.

## MKT 209 - Fashion Writing and Communication 404

Examines specific areas of fashion writing, such as: Fashion reports, press release, fashion news stories, fashion and trade magazine articles, and fashion show commentary.

### MKT 210 – Fashion Advertising and Sales Promotion

This course will serve as an introduction to sales promotion activities for all marketing levels with concentration on the specialized techniques and procedures employed to implement the activities of advertising and copywriting. It will cover the types and objectives of the different sales promotion activities used to sell fashion products and the techniques that are important to implement fashion shows, special events and publicity.

#### MKT 211 – Introduction to **Apparel Design** 404

This course examines the job of the designer, how the designer functions in the context of an apparel manufacturing firm, the mechanics of creation and production, and the principles and elements of design.

#### MKT 212-Psychology of Dress

404

Examines the interrelationship between clothing and its cultural, social, psychological, physical, economic, and aesthetic implications.

#### MKT 215 – New York Field Studies Seminar 163

Four days and three nights to New York City's Garment District to offer students of design, retailing and merchandising a behind-the-scenes look at fashion industry along with new perspective on fashion careers. Institutional visits to the Metropolitan Museum's Costume Collection, other museums and the Fashion Group Headquarters. Company visits to design studios, showrooms and factories of apparel-makers, fur, lingerie and accessories, fashion publications and other establishments. Offered upon sufficient enrollment demand once every two years.

#### MKT 221 - Menswear

This course concerns itself with the characteristics of the men's apparel industry. It will enable the student to acquire knowledge of figure proportions, sizing, wardrobe coordination and marketing techniques.

MKT 222 – Bridal Consulting 4 0 4 This course is designed to introduce bridal terminology and the components of the industry. It examines the role of the bridal consultant and the proper etiquette involved in producing a wedding.

MKT 232 – Sales Development 4 0 4 A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstration required.

MKT 239 – Marketing 4 0 4 An overall survey of the field of marketing, with detailed emphasis on marketing policies, functions and institutions involved in the marketing process.

MKT 243—Advertising 4 0 4
The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; products and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

MKT 245 – Retailing 4 0 4
A study of the role in retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends.

MKT 249 – Introduction to Fashion Buying and Merchandising 4 0 4

This course examines the responsibilities of the buyer and career opportunities. The course deals with the various types of buying institutions and the effect they have on fashion. An introduction of the fashion cycle is explored showing the student how all parts of the industry work together.

MKT 250—Advanced Buying 4 0 4 Concerns itself with the scientific use of numbers in merchandising, and the figures and mathematical techniques that are employed to translate fashion into the profit-making activities of planning, pricing, and controlling quantities. Included in the course of study will be extensive dealings with the six-month plan, markdowns, markups, assortment plans and other responsibilities of the actual buyer. Prerequisite: MKT 249.

MKT 260 – Visual

Merchandising 4 0 4

Examines display as a visual merchandising medium, and covers the principles of display design and their applications to fashion merchandising environs.

#### MAINTENANCE

MNT 1133 – Mechanical Maintenance

To acquaint the student with the basic fundamentals of installation, maintenance and repair of machines. Miscellaneous electrical, mechanical, hydraulic, pneumatic and lubrication devices are installed and maintained. Methods of rigging and use of precision measuring tools and checking for accuracy, squareness, and correct center line distance is stressed for pre-start inspection. Prerequisites: MEC 1101, 1102, BPR 1104, 1113. Corequisite: ELC 11112.

404

3204

### MUSIC

MUS 101 – Music Appreciation 3 0 3 A basic orientation to music with emphasis on simple form and analysis, instrumentation aesthetics, masterpieces and other significant words.

This course is designed to facilitate the

# NURSING - ASSOCIATE DEGREE

NUR 0100 – Nursing Role Transition

entry of the practical nurse graduate seeking advance placement into the second year (fourth quarter) of the Foothills Nursing Consortium Associate Degree program. The program's philosophy, Conceptual framework, objectives and the legal roles and responsibilities of registered nurses will be presented and practice skills will be reviewed and supplemented to equate the level of mastery of the generic student specifically in the areas of: nursing practice, nursing process, physical assessment, nursing diagnosis, nursing care planning, patient teaching, and documentation. Practice in calculating dosages and solutions of medications/fluids will also be included. A minimum grade of "C" is required for

NUR 0101 – Basic Concepts of Nursing 9 6 0 12

all advanced placement candidates prior

to being accepted into the nursing pro-

gram and must be updated every three

years. Prerequisites: LPNs or PNE grad-

uate of an approved program requesting

advanced placement (on demand).

Basic Concepts of Nursing is a foundational course which provides the opportunity for students to explore basic facts, principles and concepts related to nursing roles and functions, patient needs, nursing problems, the nursing process, and the nurse-patient relationship. Units are included in the nurse's role in assessing and meeting patients' needs for comfort, cleanliness, rest, activity, and safety, and the needs of individuals with altered body functions. Prerequisite: Admission to Program. Corequisite: NUR 0102, NUT 0101, BIO 0107.

NUR 0103-Nursing Care of

4 2 12 9 Adults 1 A study of health care needs of the adult with common problems related to cellular function, sensory, urological, mobility, and oxygenation alterations, utilizing concepts of prevention, psychophysiotherapy, and nursing management. Pre-requisite: NUR 0101, 0102, NUT 0101.

Corequisite: BIO 0108.

NUR 0104 - Nursing Care of Adults II 40128 Health care needs of individuals with common health problems related to he-

matologic, ingestive, absorptive, eliminatory, metabolic regulatory, and reproductive disorders. The concepts of prevention, psychophysiotherapy, and nursing management are utilized to guide the course of study. Prerequisite: NUR 0103. Corequisite: BIO 0109.

NUR 0105 - Mental Health Nursing 50129

A study of the person experiencing altered patterns of behavior. Major focus is upon coping mechanisms, appropriate nursing intervention, psychotherapeutic modalities, communication skills, and the formation of therapeutic relationships. The concepts of Maslow's Hierarchy of Needs and the nursing process are utilized. Prerequisite: NUR 0105, PSY 0208. Corequisite: none.

NUR 0201 – Nursing Care of the Childbearing Family

50129 A study of the roles of the associate degree nurse in the health care of the mother, infant, and family during the normal and high-risk childbearing cycle using the nursing process and a human needs theory as guides. (1/2 quarter). Prerequisite: NUR 0105, SOC 0101. Corequisite: none.

NUR 0202 - Nursing Care of Children 50129

A study of the health care of children utilizing a human needs theory, the nursing process, the nursing roles, and principles of growth and development. Both health maintenance and care of the ill child are emphasized. Consideration is given to the child within his/her family unit. (1/2 quarter). Prerequisite: NUR 0105, SOC 0101. Corequisite: none.

NUR 0203 - Nursing Care of Older Adults 40128

The course provides the student an opportunity to utilize the nursing process in meeting the needs of the older adult in the acute care, long-term care, and the community settings. Special emphasis will be placed on the aging process as it applies to the body systems and development changes. Content will include pathological alterations commonly occurring in the older adult. Planned learning experiences will be designed to give the student contact with the older adult in a variety of situations. Prerequisite: NUR 0202. Corequisite: none.

NUR 0204 - Nursing Care of the Adult III 5 0 15 10

Health care needs of the adult experiencing health problems which accompany serious or critical illness. Provides the learner with the opportunity for implementation of the nursing process in complex nursing situations. In addition, emphasis is placed upon integration of concepts, skills, and responsibilities designed to aid in the transition from nursing student to registered nurse. Understanding of the ADN roles are enhanced through a comprehensive clinical practicum in a variety of structured settings. Prerequisite: All NUR courses. Corequisite: NUR 0205.

NUR 0205 - Nursing Perspectives and Issues 3003

Major trends and issues impacting the profession of nursing. Selected events, organizations, legal and ethical aspects, opportunities, and responsibilities related to the practice of nursing are addressed. The role and functions of the associate degree nurse within the scope of nursing practice and the health care system are considered. Maslow's Hierarchy of Needs provides a framework for focusing on the student, client, and society. Prerequisite: NUR 0203. Corequisite: NUR 0204.

#### NURSING - PRACTICAL NURSE **EDUCATION**

NUR 1101 — Fundamentals

of Nursing This course is a presentation of nursing knowledge and skills necessary to meet the basic needs of patients. Areas of study include ethical and legal responsibilities; communication; and assessing, recording, and reporting pertinent patient information. Implementation of

basic nursing skills are demonstrated and practiced in the nursing laboratory. Corequisites: BIO 107, NUT 101.

NUR 1115 - Medical-Surgical

Nursing I 6 0 0 6
This course is an introduction to common adult health problems with emphasis on understanding the nursing care of patients with infections, cancer, long-term illness, terminal illness, and respiratory problems. Basic concepts in health promotion, illness processes, diagnostic procedures, therapy, and rehabilitation are explored in terms of nursing intervention, assessment, and evaluation. Prerequisites: NUR 1101, BIO 107, NUT 101. Corequisites: NUR 1112, PHM 1104, BIO 108.

NUR 1106 - Medical-Surgical

Nursing II 5 0 0 5
This course is a study of the nursing assessment, intervention, and evaluation in the care of patients with surgical conditions; and disorders affecting the circulatory, gastrointestinal urinary, and endocrine systems. Prerequisite: NUR 1115. Corequisite: NUR 1113.

NUR 1107 - Medical-Surgical

Nursing III 5 0 0 5
This course is a study of the nursing assessment, intervention, and evaluation in
the care of patients with problems affecting sexuality, mobility, neurological
function, vision, hearing, skin integrity,
and the immune response. Prerequisite:
NUR 1106. Corequisite: NUR 1114.

NUR 1108 - Obstetrical

Nursing 5 0 0 5
This course is an introduction to the needs of the mother during normal pregnancy, labor, delivery, and postpartum states. It includes a study of the needs of the newborn and an introduction to common complications of the obstetrical patient. Prerequisites: NUR 1112, NUR 1115. Corequisites: PHM 1104, NUR 1113.

NUR 1109 - Pediatric

Nursing 6 0 0 6 This course is a study of the well child, adaptation of nursing skills to various levels of development and maturation, and the nursing management of children with common pediatric illnesses. Prerequisite: PHM 1111. Corequisite: NUR 1114.

NUR 1110 - Vocational

Adjustments 1 0 0 1
This course is designed to help the student make the adjustment from the role of a student to that of a graduate practical nurse. It involves a study of ethical and legal aspects, provisions of the Nurse Practice Act, employment and continuing education relevant to the graduate practical nurse. Prerequisite: NUR 1113. Corequisite: NUR 1114.

NUR 1112-Clinical I 0 0 18 6

Beginning clinical experience in the care of adult medical patients with clinical activities planned in assessing basic needs, planning nursing care, and implementation of basic nursing skills. Prerequisites: NUR 1101, BIO 107, NUT 101, PSY 101, ENG 101. Corequisites: NUR 1115, PHM 1104, BIO 108.

NUR 1113 – Clinical II

0 0 18 6

Clinical experience in the assessment of nursing needs, planning, implementation, and evaluation of nursing care for the adult surgical patient, the obstetrical patient, and the newborn infant. Prerequisites: PHM 1104, NUR 1115, NUR 1112. Corequisites: NUR 1106, NUR 1108, NUR 1111.

NUR 1114-Clinical III

0 0 18 6

Clinical experience in the assessment of nursing needs, implementation and evaluation of nursing care for adult surgical and pediatric patients. Prerequisites: PHM 1111, NUR 1106. Corequisites: NUR 1107, NUR 1109

#### NUTRITION

NUT 101 – Nutrition and Diet Therapy

303

This course focuses on the nutritional requirements of growth and the contribution to good health by proper nutrition. The harmful effects of inadequate diet are discussed. Fundamentals of normal nutrition are used to introduce the student to diet changes, made necessary by illness. The principles of meal planning and the selection, preparation, and storage of foods are included.

#### SECRETARIAL

OSC 102 – Keyboarding/ Typewriting

223

Introduction to the touch typewriting system with emphasis on current techniques, mastery of the keyboard, simple business correspondence and tabulation.

OSC 103 – Document Formatting

223

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence and business forms. Prerequisite: OSC 102 or equivalent.

OSC 104 - Document Production/Word

**Processing** Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: OSC 102 or equivalent.

OSC 106 – Shorthand I A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms and phrases.

OSC 107 - Shorthand II Continued study of theory with greater emphasis on dictation and elementary transcription. Prerequisite: OSC 106 or equivalent.

OSC 108 – Shorthand III Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Prerequisite: OSC 107.

OSC 112 - Records

Management Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Methods covered are Alphabetic, Numeric, Geographic, Subject, Soundrex and Chronological filing.

OSC 183M – Medical Terminology and Vocabulary I

This course teaches the student the mechanics of understanding medical words-their roots, prefixes and suffixes. Students learn to spell, pronounce and define medical terms that may be encountered by a medical secretary.

OSC 201 - Machine Dictation and Transcription Objectives of this course are to develop skill in using various transcription machines and to transcribe correctly at the typewriter. The student will gain a knowledge of many kinds of business correspondence, increase business vocabulary and develop an understanding of secretarial procedures.

OSC 202M - Medical Dictation and Transcription I 223 This course prepares the student to become a skilled medical transcriptionist using a typewriter, transcribing unit and pre-recorded cassettes and belts. Material covered includes case studies, physical examinations, operation records, medical correspondence, and xray or pathological reports, etc. Prereq-

uisites: OSC 183M, OSC 205.

OSC 203M – Medical Dictation and Transcription II

This course is a continuation of OSC 202M. The student continues to build skill and speed in transcribing various medical records at the typewriter. Upon successful completion of course requirements the student will receive the AMRA certificate. Prerequisite: OSC 202M.

OSC 205 – Advanced Word Processing

Application I 223 Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, statistical tabulation, and the typing of reports, manuscripts and legal documents. Prerequisite: OSC 104.

OSC 206E - Dictation and

Transcription I 223 Develops the skills of taking dictation and transcription at the typewriter, materials appropriate to the course of study, which includes a review of theory and dictation of familiar and unfamiliar material at varying rates of speed. Prerequisite: OSC 108.

OSC 207E - Dictation and Transcription II

Covering materials appropriate to meet the course of study, the student develops the accuracy, speed and vocabulary to meet the stenographic requirements of business and professional offices. Prerequisite: OSC 207E.

BUS 208E - Dictation and Transcription III

223 Principally, a speed building course covering materials appropriate to the course of study, with emphasis on building tran-scription speed and the producing of mailable copies. Prerequisite: BUS 207E.

OSC 210-Advanced Word **Processing** 

Applications II 223 A course designed to familiarize the student with the correct typing of business correspondence. Emphasis is placed upon correct procedures and adaptability of varying office methods. Prerequisite: OSC 205.

OSC 211 - Office Machines This course is designed to teach the student the correct procedures to follow in preparing, copying and duplicating masters. In addition, the student learns to operate various types of copying and duplicating equipment. Prerequisite: OSC 104.

#### OSC 214 - Administrative

Office Procedures 2 2 3
Designed to acquaint the student with
the responsibilities encountered by a
secretary during a work day. Among
these are the following: receptionist duties, handling mail, telephone techniques, telegrams, office records, travel
information, purchasing of supplies, office organization and insurance claims.
Prerequisite: OSC 104.

#### OSC 216 – Medical Secretarial Procedures 2 2 3

This course introduces the medical secretary to the activities, responsibilities, skills and work habits encountered in the professional office. Some of these are meeting and handling patients, processing medical records and forms, managing the office and assisting the doctor. Suggested prerequisite: OSC 104.

# OSC 248 – Medical Insurance 2 2 3 This course is designed to provide medical office personnel with a basic understanding of medical insurance, terminology, types of health insurance available and claims processing for the medical secretary.

OSC 284M – Medical Terminology and Vocabulary II 4 0 4

This course emphasizes a more detailed and comprehensive study of medical terms. The student's ability to spell, define and pronounce medical words is enhanced while studying basic anatomical terminology. Suggested prerequisite: OSC 183M.

#### PHYSICAL EDUCATION

#### PED 101 - Physical

Conditioning I 0 2 1
A course designed to teach the student basic conditioning techniques with an overall objective of the physical fitness.

#### PED 102 – Softball 0 2

A course designed to teach the basic fundamental skills of softball. Emphasis is placed on conditioning, rules and skills.

#### PED 103 – Tumbling 0 2 1

The fundamentals of rolls, cartwheels, and pyramids are taught using the springboard and mats. Major emphasis of the course is to learn how to fall without injury. Group stunts are also covered.

#### PED 104 – Basketball 0 2 1

This course introduces the student to various rules, skills, and fundamental techniques of basketball.

PED 105 – Weight Training 0 2 1 Introduction to the proper skills in the execution of the various lifts and instruction in the health and safety factors that are related to the development of an individualized weight training program.

#### PED 107 – Low Impact Aerobics

021

A course designed to improve muscular strength, muscular and cardiovascular endurance, flexibility and body composition through the use of low impact aerobics routines.

#### PED 108 - Tennis I 0

A course designed to develop a higher level of neuromuscular skill, coordination, balance, endurance and tennis strategy.

#### PED 109 - Modern Dance 0 2 1

A course designed to develop and improve fundamental skills in dance movements and techniques and to encourage appreciation of dance as an art form and medium of education.

#### PED 110 - Volleyball

021

A course designed to include the fundamental skills, history, rules, and strategy of the game with special emphasis on carry-over value of activity.

#### PED 111 – Golf 0 2 1

A course designed to teach the student the rules, regulations, etiquette and fundamental skills of beginning golf.

#### PED 112 – Physical Conditioning by Circuit Training 0 2

A second course in physical conditioning designed to provide the student with advanced participation in physical conditioning and circuit training. The student also develops a personal physical maintenance program. Prerequisite: PED 101.

#### PED 113-Tennis II 0 2 1

A course designed to teach strategy and execution of successful skills used in a tennis match. Emphasis is placed on execution of forehand, backhand, serve, volley, and double plays and strategy. Prerequisite: PED 108.

#### PED 114-Physical Fitness 0 2 1

In this course students are taught aerobic exercises, composed of light to vigorous choreographed movements, designed to improve and maintain cardiovascular endurance. A major goal of the class is to lower the resting heart rate of all students.

#### PED 115-Self Defense

This course is designed to help students learn and understand basic self defense techniques. Philosophies and attitudes regarding personal security are disclosed.

PED 116-Personal and **Community Health** 303

This course, a basic study of personal and community health, includes topics such as proper health habits and attitudes, diet, drugs, and health service agencies.

#### PHILOSOPHY

PHI 101 - Introduction

to Philosophy 303

A survey course of the major philosophical writings from ancient to modern times, with special emphasis on the philosophical concepts including naturalism, idealism, systematic philosophy, realism, British empiricism, and existentialism. Representative thinkers include Plato, Decartes, Berkeley, Kant, Aristotle, St. Augustine, Hegel, Bacon, Kirkegaard, Sartre, and Camus.

#### PHARMACOLOGY

PHM 0102 - Pharmacological Concepts in

Nursing 3003

A study of principles and skills utilized in the computation and administration of medications. Major classifications of drugs are introduced as a basic continued study of pharmacology. The course emphasizes the nursing roles of provider of care, and client/patient teacher. Pharmacological agents are considered as a means of promoting health and treating illness in individuals throughout the life span. The nursing process is presented as a means of assessing and providing for optimum safety, and legal implications. (Lab time is shared with NUR 1010). Prerequisite: Admission to Program. Corequisite: NUR 0101.

PHM 1104-Basic

Pharmacology 3003

This course is an introduction to drug therapy. A foundation of general knowledge in sources of drugs, legal control of drugs, computing dosages, classification and action of common drugs, and safety factors the nurse must use in administering drugs. Prerequisite: NUR 1101. Corequisites: NUR 1112, NUR 1115.

PHM 1111 - Pharmacology II 2 2 0 3 This is a continuation of basic pharmacology with emphasis on the nurse's responsibilities in administration of intradermal, subcutaneous, and intramuscular injections. It includes basic knowledge and skills inperipheral venous access, administration of therapeutic agents via bolus and continuous infusion and monitoring patients response to therapeutic agents. Prerequisite: PHM 1104. Corequisite: NUR 1113.

#### PHOTOGRAPHY

PHO 101 - Fundamentals of **Photography** 

223

An introduction to the field of photography, photographic equipment and materials. A study of the fundamental techniques of the camera and its expressive possibilities in relation to the field of design and visual communications. Assigned camera projects, darkroom procedures and equipment.

PHO 102 - Intermediate Photography

223

A continuation of PHO 101.

PHO 119-View Camera and Zone System

A comprehensive study of the capabilities of the view camera, including: tilts, swings, shifts, plane of focus, depth of field and shape modifications. Perspective control as it pertains to architectural photography will be principle focus. A thorough study of the zone system from Ansel Adams to Phil Davis, from guestimation to exactitude will be taught. The use of computer technology in exposure and development control will be introduced, as well as sheet film handling and processing. Prerequisites: PHO 101 and PHO 102.

PHO 201 - Introduction to Color Printing

223 Introduction to Color Printing is a continuation of the learning experience begun in Fundamentals of Photography and Intermediate Photography. courses will not be prerequisites to Introduction to Color Printing.) Many aspects and techniques involved with photographing in color beyond those normally encountered in black and white photography will be covered in detail. The processing and printing in color images from color negatives and color slides will give each student a thorough working knowledge of new lab procedures and color printing techniques.

#### PHO 202 - Color Printing II 2 2:

A continuation of PHO 201 with emphasis on production of large color prints up to 20" × 24". Use of various electronic color analyzers to determine color balance and exposure. Emphasis on craftsmanship. Prerequisites: PHO 101 and PHO 201.

#### **PHYSICS**

#### PHY 107 - General Physics 4 0 0 4

This course is designed to take the student from basic fundamentals through advanced physics covering such areas as: structure of matter; electric current; electrostatics, units of measurement; electrodynamics; magnetism and electromagnetism, electric generators and motors.

#### PHY 108 - Radiation Physics 3 2 0 4

The production and control of high voltage and rectification; x-ray tubes and rectifiers and an introduction to therapy and nuclear medicine. Prerequisite: PHY 107

#### PHY 201 – Physics I 3 2 4

The first quarter of college physics; mechanics (with emphasis on measurement); vectors and scalers; force systems, translational and rotational motion; work and energy; hydraulics. Prerequisite: MAT 102.

#### PHY 202 - Physics II 3 2 4

The second quarter of college physics; kinetic theory of matter, heat, thermodynamics, wave motion and sound, and the properties of light. Prerequisite: PHY 201.

#### PHY 203 – Physics III 3 2 4

The third quarter of college physics; electricity and magnetism-status electricity, potential, Ohm's law, parallel and series circuits, Kirchoff's Laws, magnets, induced electromotive force, motors and generators. Also modern physics: relativity; Bohr atom, x-ray and gamma rays, and atomic structure, Prerequisite: PHY 202.

#### PHY 1101 - Applied Physics 4 0 4

An introduction to physical principle and their application in industry. Topics in this course include measurements, properties of solids, liquids, gases and basic electrical principles.

#### **PLUMBING**

#### PLU 1110-Plumbing

Pipework 4 12 8
This course will introduce students to the tools, fittings, and small equipment used by plumbers. Most of the time will be spent in the shop, where the student can learn how to handle these materials correctly. The student will perform operations such as threading, cutting, caulking, and sweating of the various kinds of pipe and tubing used in the trade.

#### PLU 1111 - Domestic Water

Systems 4 9 7
The installation of water distribution systems, beginning with the source of supply and including the location of pipes, valves and pumps in both single-story and multi-story buildings will be studied. Heating devices and drainage systems, including their ventilation, are part of this course. Field trips will be taken to study various types of installations.

#### PLU 1112 – Installation of

Plumbing Fixtures 2 6 4
The difference in materials and styles of
lavatories, bathtubs and sinks, and the
many ways that these fixtures can be installed will form the basis of this course.

stalled will form the basis of this course. The proper use of traps is included. The student will get actual practice by making installations.

PLU 1120-Low Pressure

Steam Systems 2 6 4
The student will become acquainted with types of low pressure steam boilers, the principles of boiler operation. Boiler accessories such as connectors, fittings, and insulation are to be included. Low pressure steam systems, their layout, and component parts will be studied and installed. Equipment used in heat transmission, such as radiators, coils and connectors will be included.

#### PLU 1123 - Hot Water and

Panel Heating 3 6 5
The piping and accessory equipment needed to transfer hot water to radiators, heaters, and coils, and the advantages and disadvantages of each of these units will be studied, including apparatus for radiant heating and panel heating. Methods of "sizing" equipment for various installations will be included. Practical application will be provided in installing this equipment.

PLU 1125 – Industrial Piping 3 9 6
Piping systems of boilers, turbines, and
steam engines especially as they are
used in steam power plants and process
piping such as in the chemical industries
will be major emphasis of this course.

PLU 1126 – Hydraulic Systems

Plumbing 334 Plumbing application in hydraulic systems. Hydraulic principles, circuits, control valves, actuators, pumps, fluids and various accessories that complete hy-draulic systems will be studied. Installation and servicing methods of these systems will be undertaken.

PLU 1128 - North Carolina

A study of the North Carolina plumbing code, in preparation for the licensing examination. Instruction will include the latest code revisions, safety measures and standard practices in the plumbing of single and multi-family dwellings, commercial establishments and industrial locations.

#### POLITICAL SCIENCE

POL 102 – Government-

National 303 English and Colonial background, the Articles of Confederation and the framing of the Federal constitution will be discussed. The nature of the Federal Union Federal powers, and political parties will be studied, as will the general organization and functions of the national government.

POL 103 - Government-State and Local

A study of the state government, state-federal inter-relationships, the functions and prerogatives of the branches will be made. Problems of administration, legal procedures, law enforcement, police power, revenues and appropriations, with special attention to North Carolina will be discussed.

POL 204 - Great Decisions - Foreign Policy

A discussion of key foreign policy issues faced by the United States and its citizens in the current year.

POL 205-The U.S.

Constitution The U.S. Constitution will be studied and discussed. In addition, the role of the U.S. Supreme Court will be analyzed.

#### PSYCHOLOGY

PSY 101 - Introduction to

Psychology A survey of major psychological theories (behavioral, cognitive, psychoanalytic, and humanistic) including the developmental process, motivation, emotion, frustration and adjustment, attention and perception, and problems of group living. Attention is given to application of these topics, to problems of study, selfunderstanding, and adjustment to demands of society.

PSY 103 – Adolescent

**Psychology** A study of the nature and source of the problems of adolescents in western culture; physical, emotional, social, intellectual, and personality development of adolescents.

PSY 201 - Abnormal

Psychology 303 Abnormal psychology studied in the context of modern life: Case studies, differdiagnosis, psychological dynamics of abnormal behavior, including theoretical, clinical and experimental contributions in the field. Prerequisite: PSY 101.

PSY 202 – Group Processes A study of dynamics and leadership roles utilizing group experimentations. Applicability to other settings is also explored.

PSY 208 - Human Growth

and Development 303 A developmental approach in examining processes of growth physically, intellectually, psychologically, and socially. Covers infancy, adolescence, adulthood, and aging.

PSY 209 - Living With Ten-to-Fifteen Year Olds

The study of the processes of development for a specific age group, such as adolescence. (Only one age grouping will be covered each time the course is taught and will depend upon interest.)

PSY 210 – Child Psychology A study of the child from conception through pre-adolescence. Social, intellectual, emotional and personality development are emphasized.

PSY 238 – Dynamics of

Group Encounter 303 A close in-depth study of sensitivity training. Student participation will enhance this course in actual group situations. Explorations of group behavior of others and role playing techniques of individuals is analyzed along with the dynamics of group relations and interrelations.

PSY 240 - Motivating the Individual

303 This course introduces the student to the principles that are considered the basis for self-confidence, for goal achievement and success in the competitive career world, for recognition and personal achievement, and for successful living.

PSY 1101 – Human Relations A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationship within the work situation.

#### **RADIOGRAPHY**

RAD 101—Positioning I 3 2 0 4
This course will cover basic radiographic positions for the upper and lower extremities. Basic radiographic terminology will be taught.

RAD 102 – Principles of Radlographic Technique I 3 2 0 4

The student will be taught the fundamental principles of radiographic exposure. This course will include all technical information of proper contrast and technical selections needed for radiography conversion of techniques, evaluation of technical quality, and technical changes necessary to improve quality.

RAD 103-Processing

Technique 2 2 0 3
This course will deal with automatic processing and film critique for darkroom application, the chemical uses, their purpose in processing and methods of quality control.

RAD 104—Radiographic
Anatomy 4 0 4

A study of the anatomy of the nine systems of the body with special emphasis on the skeletal system.

RAD 105 – Critique I 1 0 0 1
Evaluation of repeated radiographs and high quality radiographs to instruct students in prevention of technical and positioning errors and how to attain quality radiographs. Special emphasis will be placed on positions taught in Positioning I.

RAD 106 – Clinical I 0 0 15 5
Practical experience in a clinical setting. This experience will include practice in ethical and attitudinal situations during patient contact, patient care and basic positioning for radiologic studies of the chest, upper and lower limbs, and the abdomen. The student will process radiographs and apply basic principles in radiographic exposure. Departmental professional procedures will be initiated into the student's clinical routine.

RAD 110-Introduction to Radiologic Technology 1 0 0 1

An introduction to the field of radiology with an overall view of Radiologic Technology and the part radiology plays in medicine. The student will become completely acquainted with the ethics and basic radiation protection and will be acquainted with the administrative structure of the hospital and departmental functions. Basic patient care is also presented.

RAD 111 – Positioning II 3 2 0 4 This course will cover basic radiographic positions of the spine and skull. Prerequisite: RAD 101.

RAD 113 – Critique II 1 0 0 1
A continuation of Critique I with special emphasis on positions taught in Positioning II.

RAD 114 – Clinical II 0 0 15 5 The student will apply, in the hospital, what they have learned in class. All students will be under the supervision of an instructor or a registered technologist.

RAD 121 – Positioning III 3 2 0 4
This course will cover basic radiographic positions of examinations using contrast media and advanced skull positioning. Prerequisite: RAD 111.

RAD 123 – Critique III 1 0 0 1 A continuation of Critique II with special emphasis on positions taught in Positioning III.

RAD 124 – Clinical III 0 0 24 8
Three days of practicum in the hospital to apply all the didactical knowledge acquired in the two previous quarters.

RAD 131 – Positioning IV 4 0 0 4 The final study of radiographic positioning including nonroutine positions and pediatric radiology.

RAD 134 – Clinical IV 0 0 24 8 Intensified practicum in the hospital to apply all the didactical knowledge the student has acquired in the past year.

student has acquired in the past year RAD 141 – Special

Procedures I 2 0 0 2
Detailed studies of special procedures, the related pathology and anatomy demonstrated and the contrast media used.

RAD 201 – Radiologic
Protection 4 0 0 4

This course deals with the effects of radiation on the body, ways of patient and personal protection and governmental regulations.

RAD 203 – Clinical V 0 0 24 8 Continuation of practicum with emphasis on finer details of improvements to attain a high quality in practicum.

RAD 212—Clinical VI 0 0 24 8 Practicum with emphasis on special procedures and examinations not commonly performed on a routine basis.

RAD 222 – Principles of Radiographic Technique II 2 2 0 3

Advanced formulation of techniques for all phases of radiography. Experimentation on various technical procedures with written reports to coordinate results of experiments. Prerequisite: RAD 201.

BAD 223 - Clinical VII 0 0 24 8 Detailed practicum preparing for graduation

RAD 233 - Clinical VIII 0 0 36 12 Practicum within the hospital with oral and practical examination. General evaluation of the student's practicum capabilities will be summarized.

RAD 245 - Seminar I 1001 A general course that will prepare the student for national certification.

RAD 246 - Seminar II 2002 A continuation of RAD 245, Students will become certified in CPR.

#### READING

RED 100 – Basic Reading Skills 3 0 3 A course designed to improve the student's basic reading skills. Content includes reading comprehension, vocabulary, word attack skills and word recognition skills. This is a developmental course which will not count for credit toward any degree, diploma or certificate program.

RED 104 — Reading **Dynamics** 303 An aid to improve the student's ability to read rapidly and accurately. Special emphasis on comprehensive, vocabulary critical and analytical reading skills, and the study of reading materials related to the student's curriculum.

RED 1101 – Reading Improvement 404 Designed to improve overall efficiency with special emphasis on purpose, comprehension, word recognition skills, and the study of reading material related to

#### RELIGION

the student's curriculum.

REL 101 - Major World Religions 303 A comparative religion course examining six major religions: Hinduism, Buddhism, Zoroastrianism, Islam, Judaism, and Christianity.

REL 102 - Old Testament Survey A survey of the history, literature, personalities and religion of the Old Testament.

REL 103 - New Testament Survey 303 A general survey of the New Testament literature including the Hellenistic background, the life and teaching of Jesus, the growth and faith of the church, the letters of Paul and other writings.

#### REAL ESTATE

RLS 162-Fundamentals of Real Estate 606

This course consists of instruction in fundamental real estate principles and practices, including real estate law, financing, brokerage, closing, valuation, management, taxation and mathematics. Also included is instruction on residential building, construction, land use, the real estate market and the North Carolina Real Estate Commission. Upon completion of this course, the student will have met the educational requirements of the North Carolina Real Estate Licensing Board for admission to the real estate broker licensing examination. The primary objectives of this course are (1) to provide students with the basic knowledge and skills necessary for entry-level estate salesmen and (2) to prepare students for the real estate salesman licensing examination.

RLS 164 – Real Estate Law 303 This course consists of advanced-level instruction in real property ownership and interests, transfer of title to real property, land use controls, real estate brokerage and law of agency, real estate contracts, landlord and tenant law, mortgages/deeds of trust, property insurance, federal income taxation of real estate, the N.C. Real Estate Licensing Law, Rules/Regulations of the N.C. Real Estate Licensing Board, and the Licensing Board's "Trust Account Guideline." Prerequisite: RLS 162 or possession of a current salesman's license.

RLS 209 - Real Estate Finance

303

This course consists of advanced-level instruction on the major aspects of financing real estate transaction, including sources of mortgage funds, the secondary mortgage market, financing instruments, types of mortgage loans, underwriting mortgage loans, consumer legislation affecting real estate financing, real property valuation, closing real estate sales, transactions and finance mathematics. Prerequisite: RLS 162.

RLS 234 - Real Estate Sales and Brokerage 303

This course consists of basic instruction in the various aspects of real estate brokerage operations including establishing a brokerage firm, management concepts and practices, personnel and training, marketing operations, records and bookkeeping systems (including trust account bookkeeping), and financial operations. Prerequisite: RLS 162 or possession of a current salesman's license.

#### RADIO, TELEVISION

#### RTV 100-Introduction to Television and Cable Production

An introduction to creative techniques, materials, and equipment involved in television taping. Pre-production, production, and post-production principles and methods are designed for beginning and intermediate students to improve their use of home and professional systems.

#### RTV 101—Advanced Television and Cable

**Production** 324 A continuation of RTV 100; use of studio equipment for titling and effects; special projects on television production.

#### RTV 102 - Introduction to Audio-Visual Equipment and **Basic Production**

223 A study of the operation of projection equipment, tape recorders, record players and synchronization equipment.

RTV 103 — Media Writing 324 The study and production of the various formats for effective writing for radio, television, and film.

#### RTV 104-Introduction to Mass

Communication 303 History and review of media development and means of informing and influencing public views.

RTV 118 - Basic Film Technology

223 A study of basic film techniques including camera use, lighting, exposure, editing, emphasis on distinction between film and video; animation; projects in "Super-8mm."

#### RTV 200-Media

Production I Planning, scripting, and developing sequences for transparencies, audiotapes, displays, videotapes, films, titling, audio mixing, displaying materials. Prerequisite: RTV 102.

RTV 201 – Media Production

0 10 5 Lab Project Student will work in cooperation with the photography and the audio-visual services department in the production of instructional and institutional media.

RTV 205 - Equipment Repair 223 This course is designed to help the student understand the mechanical and electrical operations of projection equipment, tape recorders, record players, cable and television equipment, etc. Emphasis will be on locating, troubleshooting, and repairing equipment.

RTV 206 - Lighting and Sound

A study of the use of lighting for stage, film, and video; a study of studio sound problems, microphone types, and use of audio mixers.

RTV 207 - Video Graphics 324 A study of and creation of computer-generated television images, from titling to animation.

RTV 208 - Law and Ethics 303 A review of the legal and moral principles that have influenced and continue to influence conduct in media communication.

#### SAFETY

SAF 106 - First Aid and

Safety Students taking this course should acquire a better understanding of first aid and emergency care products.

#### SOCIOLOGY

SOC 101 – Introduction to

Sociology 303 An introductory course in the principles of sociology, culture, personality development, social class, and social control. Presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships, and the effects of social life on human personality and behavior.

SOC 202 – Marriage and

Family 303 A course designed to provide understanding of family relationships; a functional approach to the interpersonal relationships of courtship, marriage, and family life.

#### SOC 203 — Contemporary issues

303 A culminating interdisciplinary course dealing with basic economic, social, sci-

entific and moral issues confronting human society.

SOC 208 - Black Studies This course is designed to provide opportunities for students to review, discuss and evaluate the experience of Black Americans through the use of films, filmstrips, records and tapes as well as selected readings from autobiographies and biographies of distinguished Black Americans, historical records and documents, and outstanding works of literature and art. Resource people in the community are used whenever possible.

#### **SPANISH**

SPA 160 - Fundamentals of

324 Spanish I

This is a program of study designed to teach understanding, speaking, reading, and writing of Spanish and to grant an awareness of Spain and its people.

SPA 161 - Fundamentals of Spanish II

324 A continuation of Fundamentals of Spanish I. Prerequisite: SPA 101.

SPA 162 – Fundamentals of Spanish III

Spanish I

324 A continuation of Fundamentals of Spanish II. Prerequisites: SPA 101, 102.

SPA 260 - Intermediate

324

324

324

In this course of study, the fundamentals of Spanish are used in the background for a basic study of culture, civilization and literature of Spain with further development of language skills. Prerequisite: Fundamentals of Spanish I, II, III or two years of high school Spanish.

SPA 261 – Intermediate

Spanish II

A continuation of Intermediate Spanish I. Prerequisite: SPA 202.

SPA 262 - Intermediate Spanish III

A continuation of Intermediate Spanish II. Prerequisites: SPA 201, 202.

#### SPEECH

SPH 204 - Fundamentals of Speech 303

A study of basic concepts and principles of oral communication to enable the student to communicate with others. Emphasis on the speaker's attitude, improving diction, voice and the application of techniques to correct speaking errors and improve oral presentations.

#### WELDING

WLD 1101 - Basic Gas Welding 132

Welding demonstrations by the instructor and practice by the students in the welding shop. Safe and correct methods of assembly and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver soldering, and flame cutting methods applicable to mechanical repair work.

WLD 1105 - Auto Body Welding 132

Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods and deck lids. Student runs beads, does butt and fillet welding. Performs tests to detect strength and weaknesses of welded joints. Safety procedures are emphasized throughout the course.

WLD 1120 - Oxyacetylene 264 Welding I

This course is designed to acquaint the student with the safety rules of welding, identification, set-up and operation of oxyacetylene welding equipment. The student will be able to carry a puddle without filler rods, weld in the vertical, horizontal and overhead positions, weld heavy steel plates, identify, weld and braze cast iron, and operate a cutting torch efficiently. The student will be introduced to welding symbols and metallurgy as it relates to oxyacetylene welding.

WLD 1121 – Arc Welding I 264 The student will learn the safety rules of welding, understanding the operation and use of the arc welding machine, identify and know the importance of per-

sonal protective equipment, identify welding tools and types of electrodes, strike an arc and run a bend, and bond two pieces of metal together. The student will be introduced to welding symbols and metallurgy as it applies to arc welding. The student will also become acquainted with blueprints and how they relate to arc welding.

WLD 1122 - Commercial and Industrial Practices I

This course is designed to instruct the student in the proper procedure for repairing broken equipment, to fabricate and build parts from new stock. The student will learn the inert gas welding process, practice and become proficient in flat-plate welding and also become familiar with the welding codes, specifications, and certification of the American Welding Society.

WLD 1124 – Pipe Welding I This course is designed to give the student knowledge in the operation of pipe welding equipment and accessories, specific welding operations, preparing a welding joint, welding in specified positions, obtaining knowledge of designing and fabrication of pipe and duct ways. The student will be introduced to welding symbols and metallurgy as it applies to pipe welding.

| WLD 1320 - Oxyacetylene<br>Welding II                    | 396 |
|--|-----|
| A continuation of WLD 1120.                              |     |
| WLD 1321 – Arc Welding II<br>A continuation of WLD 1121. | 396 |
| WLD 1322 – Commercial and Industrial                     |     |
| Practices II   | 396 |
| A continuation of WLD 1122.                              |     |
| WLD 1324 – Pipe Welding II A continuation of WLD 1124.   | 396 |

WLD 1330 - Machine Shop Welding 132

Arc welding demonstrations by the instructor and practice by the students. The operation of AC and DC arc welding machines. Studies are made of welding heats, polarities and electrodes. Practice will be given for masking groove and fillet type welds. Also deals with the physical and chemical behavior of the metals during shaping, welding, and treating operation.

#### WOODWORKING

WWK 1306-Introduction to Woodworking

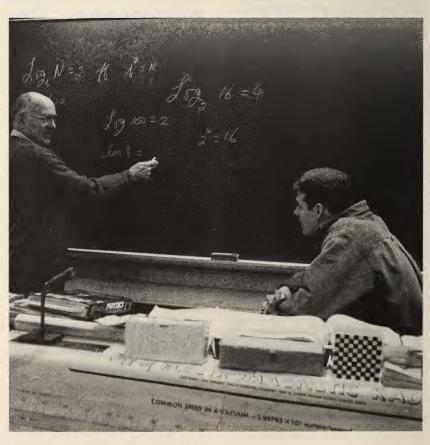
404

A beginning course in hand woodworking tools and use. This course covers major hand working tools, their care, maintenance and use; types of wood and their use as related to industrial. commercial and residential use.

#### ZOOLOGY

ZOO 201 - Advanced Zoology 324

A comprehensive study of the animal kingdom including anatomy, physiology, taxonomy, and ecology. Special emphasis will be placed on the invertebrates, and local animals. Prerequisites: BIO 101, 102, 103, or permission of instructor.



### **NON-CREDIT PROGRAMS**



# INDUSTRY AND COMMUNITY SERVICES

#### CONTINUING EDUCATION PROGRAMS

Adult or Continuing Education as defined in this catalog includes activities designed to meet the needs of people beyond compulsory school age whose major occupation may not be that of a full time student. It is the purpose of Cleveland Community College to afford this opportunity to each individual to develop to the fullest potential in vocational, intellectual or cultural areas. It is also the aim of the College to be of service to area industries, businesses and public agencies by providing training and upgrading for employees. In order to meet these aims the Extension and Adult Education Division of the College will help make continuing education available by offering a variety of courses and programs.

The extent of different programs and courses is based upon the interest shown by the community, availability of competent instructors and the limitations of available equipment, space and funds. Whenever possible, courses are scheduled as community needs or interests are indicated. Some classes, constantly in demand, are offered on a continuing basis. Others are started at the request of individuals or organizations. The College welcomes such requests and suggestions for additional courses.

Continuing education classes conducted by Cleveland Community College have four separate classifications: occupational, academic, practical skills, and avocational. The classes are non-curriculum, vary in length, conducted both day and evening, and are taught by qualified instructors selected by the College. A schedule of some classes being offered is announced by the College prior to each quarter and other classes are announced during the quarter, as they are arranged.

#### **ADMISSION**

Any adult 18 years or older or any public school student 16 years or older with valid dual enrollment forms are eligible to enroll.

#### REGISTRATION

Registration will be held at the first class meeting unless specified otherwise. In some instances when enrollment is limited, adults should notify the College by phone, letter, or personal visit to place their names on the pre-registration list for classes.

#### **EXPENSES**

Continuing Education classes have a \$35.00 registration fee. The only exceptions to the fees are in Fire Service and Law Enforcement Training programs including Civil Preparedness courses and programs for Emergency Medical personnel. Also, registration fees are waived for North Carolina residents 65 years of age or older in all courses. A charge may be necessary in some courses for class supplies. Books, when required, are available through the College Store for both campus and off-campus classes.

#### REFUNDS

Registration fees for Continuing Education classes are collected for the State and are generally non-refundable. Refunds will be granted if the class is canceled by the College except in the case of poor attendance.

#### **CLASS LOCATIONS**

Many of the Continuing Education classes are held on the campus at Cleveland Community College. Others are conducted throughout Cleveland County in local public schools, community centers, churches, industries, businesses or wherever a suitable meeting place can be arranged. Classes may be organized in any community whenever a sufficient number of prospective class members indicate an interest.

#### **ATTENDANCE**

A minimum enrollment of 15 persons is needed to conduct a class. Adults are expected to attend class regularly. Attendance records are maintained by the instructors. Insufficient enrollment or attendance may result in cancellation of the class.

#### **CERTIFICATES**

Certificates are awarded in certain classes to students successfully completing course requirements. Also, a certificate of High School Equivalency (GED) is awarded to adults who successfully complete the high school equivalency tests.

#### INSTRUCTORS

Qualified instructors, as determined by the Extension and Adult Education Divisions, will be employed for Continuing Education classes.

#### OCCUPATIONAL EXTENSION EDUCATIONAL PROGRAMS

Extension classes are designed to meet the needs of industry, business and other areas of occupational endeavor. Specifically, classes may be organized when there is a need for:

- 1. Upgrading for those within a specific occupation.
- 2. Retraining classes for those wishing to change their vocation.
- 3. Preparation of individuals for initial employment.

All classes are organized where a demand for certain skills is required, based upon the needs of the firm or group as represented. The classes may be arranged on a short or long-range schedule as needed. Flexibility is the key asset in the Occupational Extension Program.

The following is a partial list of the many broad areas of instruction in which training is available:

# Fire Service Training Law Enforcement Training Industrial Training

#### **NEW INDUSTRY TRAINING**

One of the primary functions of Cleveland Community College is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a type of training geared to the needs of new and/or expanding industries. With some limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer special programs for training the production manpower required by any new or expanding industry which results in creating new job opportunities for North Carolina.

In addition to helping any new or expanding industry meet its immediate manpower needs the program seeks to encourage each industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

For further information on the New or Expanding Industry program, please contact the Department of Continuing Education, Cleveland Community College, or the Director of the Industrial Services Division, North Carolina Department of Community Colleges, Raleigh, North Carolina.

#### **GENERAL ADULT EDUCATION**

General Adult and Community Service classes and programs are offered through the Extension Division of Cleveland Community College to enable individuals to gain personal satisfaction and knowledge through self-advancement. These programs include opportunities for intellectual growth, the development of creative skills or talents, the learning of hobby or leisure time activities, and the opportunity of gaining civic and cultural awareness.

#### TEACHERS' CERTIFICATE RENEWAL

Teachers' certificate renewal courses and workshops are provided by Cleveland Community College in cooperation with the local public school systems within the county.

The courses and workshops are initiated by the College or the public school systems based on interests and needs expressed by school teachers and officials. In the past, these have included such courses as Great Decisions, Psychology, Guitar, Drawing and Sketching, Anthropology, Computer Training, and media workshops.

When a need for a particular course has been determined, Cleveland Community College, working cooperatively with the public schools in-service directors, plans and organizes the class, scheduling

it for a time convenient to the participants.

Teachers receive one (1) C.E.U. toward certificate renewal for each 10 hours of successfully completed work.

#### **FOCUSED INDUSTRIAL TRAINING**

The primary goal of the program is to provide a comprehensive training program capable of meeting the expressed training needs of the industries of Cleveland County. The College works jointly with industrial representatives to assess their needs and provides appropriate training to upgrade their employees' skill levels.

Working cooperatively with industry, the staff selects course content, decides on the length, time and location for the course to be offered. Instructional personnel is selected for training courses on the basis of competence in the specific subject area to be taught.

The training is conducted on a competency based instructional mode. External and internal evaluation of trainee progress by the program staff and the trainee's employer is a cooperative venture.

#### COMPREHENSIVE EDUCATION PROJECT

The Comprehensive Education Project which is located at the correctional institute is structured toward meeting the academic, vocational, and social needs of selected medium custody inmates who plan to reside in the South Piedmont area when paroled.

Upon completion of the program, the inmates receive a certificate in the vocational areas of Electrical Installation and Maintenance (9 months), Welding (6 months), Residential Carpentry (9 months), Plumbing (6 months), Food Service Management or Cooking and Baking (6 months). The inmates attend class 30 hours a week.

Related subjects are required in the areas of reading, math, and human relations. Preparation for the GED examination is also available

with the test being administered monthly.

It is anticipated that each inmate who completes the Comprehensive Education Project will acquire the necessary vocational skills to obtain permanent employment under the work-release program and retain this employment upon his release.

#### CONTINUING EDUCATION

#### ACADEMIC COURSE DESCRIPTIONS

Algebra: A course designed to teach the basic fundamental concepts and operations of algebraic computations including grouping, factoring ratio and proportion, and quadratic equations. Application to practical problems will be stressed, 33 hours.

Anthropology: The Ascent of Man, a series of 13 outstanding films that dramatically portray the interrelations of science and the humanities throughout history, is used as a basis for this course. The main interest is on the cultural evolution of man from pre-historic times up to the present. 20 hours.

Business Mathematics: A study of mathematical solutions to business problems including graphical representation of business data and the concepts of various functions as tools for analyzing pertinent business data. 24 hours.

Genealogy/Local History (N.C.): This course has a two-fold purpose; to teach the mechanics of genealogy with opportunities to apply the lessons learned; and to teach the history of North Carolina with special emphasis on local history. Several field trips are included. 100 hours.

Great Decisions: A yearly study and discussion of the eight most important issues facing our nation at the current time. 20 hours.

Income Tax Preparation: Instructions are offered in basic fundamentals of individual income tax preparation. Topics considered are gross income, deductions and exemptions, joint and separate returns, tax computations, and methods of reporting income. Both state and federal forms are covered in this class. 30 hours.

Metric System: A basic course in the use of the Metric System. Conversion tables are used in the class in order that students may become familiar with metrical computations as compared to conventional methods. 24 hours.

Music Theory: The course is designed for pianist, organists, and other musicians with no formal training in music theory. Course includes major and minor scales; major, minor and dominant seventh chords; elementary harmony; simple modulation, transposition of simple pieces; sight singing; and an investigation of rhythm. 20 hours.

Psychology: The basic principles of psychology are explored and how they may be applied to practical problems of every day life. The aim of the course is to help people get along better in school, jobs and human relations. 33 hours.

Sign Language: Instruction is designed for the parents of deaf children and for others who come in contact with deaf people. Classes begin with finger spelling and continue through the more difficult signs. 33 hours.

Sociology: A course designed to create a knowledge and awareness of the problems in society today and to fit the students for involvement in those problems that affect their personal lives. Information from other fields in the social sciences have a bearing on major social problems will be incorporated in the course, 33 hours,

Effective Speaking: Theory and practice in the art of effective speaking. Instruction will center around methods of planning and presenting the talk. Class reactions will be used as a method of evaluation and emphasis placed on the dynamics of public speaking. Self-confidence, poise, creative thinking, personality development, and effective communications with others will be stressed. 20 hours.

Securities and Investments: Stocks, bonds, and mutual funds will be the central area of focus in this course. Discussions will include the operation of the stock exchanges, buying and selling procedures, analysis of stocks and bonds for investment purposes, and when to buy and sell. 33 hours.

Short Story Writing: This course will provide the beginning writer with an understanding of the basic concepts of the elements and structure of short story. Content will include characterization, mood, perspective, plot and use of symbolism. 24 hours.

Speed Reading: A program designed for the average adult reader who needs to improve overall reading efficiency including speed, comprehension and flexibility. This course welcomes the supervisors and others in management positions who have much paper work and whose jobs require much reading. 24 hours.

#### CONTINUING EDUCATION OCCUPATIONAL COURSE DESCRIPTIONS

Amateur Radio Operations: A course which deals with basic electronics and a working knowledge of Morse Code. Successful completion of the course prepares students for taking the FCC Amateur Radio Licensing examination. 45 hours.

Auto Mechanics: General troubleshooting of the automobile engine electrical system and fuel system including replacement of spark plugs, ignition points, condenser, rotor, distributor cap, coil, ignition, cables and wires. Setting up of engine with instruments such as a dwell meter, timing light, volt and amp meter, vacuum gauge and general carburetor repair such as fuel filter replacement and adjustment of automatic choke is also included, 33 hours.

Basic Horticulture: A course designed to familiarize participants with the fundamentals of soil fertility, the principles of attractive home landscaping, the characteristics of various ornamental plants suitable for home landscaping, vegetable gardening, plant maintenance, and small greenhouse structures. 20 hours.

Bookkeeping: A course dealing with methods of recording and reporting business records. Practical work is done involving business, individual and family bookkeeping, 30 hours.

Bricklaying: Instruction will be geared to practical work in how to mix and spread mortar, lay bricks, and proper use of the masonry rule. Simple construction projects will constitute a large part of the course. 88 hours.

Cardio-Pulmonary Resuscitation: A special class dealing with the various techniques of cardio-pulmonary resuscitation. 10 hours.

Emergency Medical Technician (EMT): A more detailed course with emphasis on the development of skill in recognition of systems of illness and injuries and proper procedures of emergency care. Much stress will be given in demonstration and practice as a teaching method. Ten hours of in-hospital observations is included. 142 hours.

Emergency Medical Technician (EMT) Refresher: A course in skills training and retraining for Emergency Medical Technicians required once every two years. A minimum of 33 hours.

Emergency Medical Technician Intermediate (EMT-I): A course in addition to the skills of an EMT-I will learn to perform the following under the direction of a physician at a sponsor hospital: to insert an esophageal airway; establish peripheral venous access; obtain venous blood sample for laboratory analysis; administer medications on EMT-I formulary; and utilize advanced life support equipment on EMT-I performance list. 156 hours.

First Aid: This course is taught by an approved American Red Cross instructor and is open to anyone interested in learning how to care for the victims of an accident or illness. Topics covered include bandage application, use of tourniquets and temporary splints, care of eye and burn injuries, artificial respiration and safe use and storage of medicines. Students completing the course are certified by the American Red Cross. 15 hours.

Funeral Service Training: An annual variety of topics relating to funeral service personnel to meet continuing education requirements of the North Carolina State Board of Mortuary Science. Each topic is of five hours duration.

General Contractor's Seminar: A course designed to help those wishing to take the North Carolina General Contractor's Exam. This course helps students to become familiar with the latest code revision and standard practices in construction, 33 hours.

Inservice classes: Inservice classes are offered to various groups who are required to complete annual inservice training. Examples are electrical contractors, tanning bed, day care workers, nursing assistants, etc.

Medical Terminology: A course designed to build a workable medical vocabulary for office and hospital clerical personnel.. Terminology commonly used in the medical setting will be presented. Hours of course flexible to needs.

Multimedia First Aid: A course covering the same topics but using American Red Cross films for demonstration followed by actual practice of the techniques by the students. 8 contact hours.

National Electric Code: This course is provided for those who wish to study the National Electric Code in preparation for the licensing examination. Instruction will include the latest code revisions, safety measures and standard practices in the wiring of single and multi-family dwellings, commercial establishments and industrial locations, 80 hours.

Notary Public: This 4-hour class is designed to prepare participants to be commissioned as a Notary Public with the State of North Carolina. Topics to be covered are requirements for collecting fees, general powers and limitations, oaths and affirmations, depositions, affidavits and negotiable instruments. Participants must reside or work in the state of North Carolina, read and write English and purchase the approved manual Notary Public Guidebook.

Nursing Assistant: A program designed to give instruction and practice in basic bedside care of the sick, especially the hospitalized patient. Basic procedures such as bathing, bedmaking, taking vital signs, collecting specimens, feeding the patient, moving, lifting and positioning the patient are included. The class consists of lectures and laboratory work in addition to some clinical practice in a local hospital, 120 hours.

Office Practice: A course for all clerical personnel stressing techniques of letter writing, correct spelling, communication skills both oral and written, and proper telephone usage. Hours adjusted to needs of students.

Practical Welding: Students will be given basic practice in all types of welding procedures and flame-cutting methods which are associated with mechanical and farm repair work. Safety procedures are stressed throughout the course in the use of tools and equipment. 33 hours.

Recreational Therapy: A course using modifications and adaptations in recreation and physical education activities for nursing home and handicapped persons. A combination of physical activities and arts and crafts is used in order to bring about a well-rounded adjustment. Class hours flexible according to need.

Upholstery: Instruction includes the techniques of general furniture upholstery including webbing, springing, stuffing, trimming, sewing, restoring, repairing, mounting and tying springs. Equipment is furnished but students supply their own materials and may work on their own furniture with direction and assistance from the instructor, 60 hours.

#### CONTINUING EDUCATION

#### PRACTICAL SKILLS COURSE DESCRIPTIONS

Auto Tune-Ups: General troubleshooting of the automobile engine electrical system and fuel system including replacement of spark plugs, ignition points, condenser, rotor, distributor cap, coil, ignition, cables and wires. Setting up of vacuum gauge and general carburetor repair such as fuel filter replacement and adjustment of automatic choke is also included, 33 hours.

Clothing Construction I: Designed for new sewer or anyone who wishes to brush up on basic sewing techniques. Time will be devoted to learning the necessary equipment for successful sewing, proper selection and fitting of pattern and materials; step by step construction of one or more garments; lectures, demonstrations, practical applications of sewing procedures; individual instruction in use of machines during class time. 33 hours.

Clothing Construction II: More detailed instruction for more complicated assembling of garments such as underlining, different sleeves, collars, pockets, trims, buttonholes, and other items. Fashion and styling will also receive attention in this class, 33 hours.

Custom Sewing: An advanced course for those students who wish to progress beyond dressmaking. Students will make suits, coats, men's and ladies' sportswear and other projects as desired by individual members of the class. 60 hours.

Jewelry Making: Instruction will be given in the basics of good design and creativity in various types of jewelry making. The use of jewelry tools in sawing. filing, soldering, setting, etc., will be stressed. Students will be responsible for their own supplies and materials. 33 hours.

**Microwave Cooking:** Basic instruction will be offered in the many functions of a microwave oven. The cooking of all types of food including vegetables, meats, and desserts will be covered. Proper utensils for microwave cooking will also be stressed. 33 hours.

**Motorcycle Mechanics:** This course is especially designed for those people interested in servicing their own motorcycle and other small engines. Students who complete this course will be able to service and repair their own motorcycle. 36 hours.

**Nutrition and Weight Control:** Training in selection of proper diet for best health, avoiding obesity and related disease, determining one's proper weight, how to achieve and maintain it. 18 hours.

**Picture Framing and Matting:** A general course in introduction to picture framing and matting. The course will introduce students to proper tool selection, measuring, wood selection, mitering and selection and proper mat cutting. 33 hours.

**Quilting:** Instruction in the techniques of quilting which will include: patchwork, applique, shadow appliques, soft shading, lap quilting, making pillows, drafting patterns, and continuous bias binding. 33 hours.

**Small Engine Repair:** Instruction in the techniques of two and four cycle engine repair including reconditioning, tune-ups, replacement of parts and detection of engine trouble. 48 hours.

**Taxidermy:** A basic course in the fundamental principles of taxidermy. Step-by-step methods are used beginning with birds and fish. Advanced classes progress to larger and more complex animals. A practical course. 33 hours.

#### CONTINUING EDUCATION

#### AVOCATIONAL COURSE DESCRIPTIONS

**Basketweaving:** Students will learn the history and techniques of various basketweaving styles, such as: market baskets, key baskets, egg baskets, round baskets using a variety of weaving techniques and materials. 33 hours.

Cake Decorating I: An ideal course for the homemaker who would like to learn the art and techniques of decorating cakes for all occasions. Instruction will include preparation and application of various icings, borders, writing, drawing and making flowers for cakes. 33 hours.

**Calligraphy:** This course teaches the art of calligraphy, a beautiful and elegant handwriting. Students will become familiar with pen styles, basic strokes, commercial script, line and letter placement. 33 hours.

**Candy Making:** Instruction in how to make professional looking candies will be stressed. Recipes, correct cooking procedures, and use of candy thermometer will be covered. 33 hours.

**Ceramics:** A popular class where students learn of the formation, finishing and firing of creative pottery. Finishing processes will include pouring, cleaning the greenware, decorating, glazing and firing for the finished product. 33 hours.

China Painting: A course in which various types of designs and flowers are applied to chinaware and tiles. Practice in painting and firing is included in the course, 33 hours.

Community Chorus: A mixed voice musical organization open to all adult members of the community service area with audition. Two or three major concerts featuring a variety of music are given by participants each year. Each rehearsal contains vocal technique and instruction in music reading. 32 hours.

Copper Tooling: A fascinating craft class where students make beautiful and useful objects for the home. Simple tools are used for various patterns on copper and brass which are then used to make pictures, plagues, waste baskets, flower urns, etc. 30 hours.

Crewel Embroidery: The class will learn a variety of stitches with different types of threads; needlepoint and cross stitching. Students are encouraged to create their own designs. 33 hours.

Crochet: A course in the basic principles and art of crocheting, including the actual construction of articles and designs from simple to complex. Students furnish their own materials. 33 hours.

Decoupage and Repousse: An interesting and inexpensive leisure time activity involving painting, sanding and finishing items such as table tops, ash trays, picture frames and other similar items which can be used for decorative purposes in the home. 24 hours.

Drawing: The course includes one-minute gesture drawings, contour drawings, modelled drawings and quick form studies. Media used are pencil, pen and ink, ink wash, crayon and water colors. Perspective and drapery studies are included. 33 hours.

Floral Design: A practical course related to actual arrangements of live and artificial flowers. Students learn uses of flowers, containers and accessories, design principles, color and texture, and arrangements for special occasions. 33 hours.

Holiday Decorations: (Arts and Crafts). An exciting class with emphasis on handcrafts and hobbies for home decorating and other occasions. Students will learn to make useful items from such things as bottles, cards and numerous other scrap materials. 33 hours.

Interior Decorating: Primary attention will be given to art and practice of decorating. Emphasis will be given to choice and arrangement of furniture; color and how to use it; flooring surfaces and floor covering; window treatment with draperies and curtains. 33 hours.

**Knitting:** Instruction will be given in the basic stitches; knitting language—its terms, definitions, symbols and abbreviations; pattern reading; knit tips. Each student is is asked to complete a small project during the course. 33 hours.

Macrame: A popular and fascinating craft class using various knot-tving materials to make hanging basket holders and other useful objects and designs for the home, 33 hours.

Needlepoint: The student learns to do background stitches; a variety of novelty stitches; transfer of graphs and charts to blank needlepoint canvas, and from that step to transfer on mesh canvas. Finally the student has learned to create a design to be worked in needlepoint for whatever purpose the student intends--upholstery material, draperies, framing, wall hanging, etc. 33 hours.

Painting with Acrylics: Same as for oils with more emphasis on modern techniques in the use of the versatile material which is easy to handle, fast drying, waterproof, and easy to mix for different colors. Instruction will involve mixed media and various painting methods. 33 hours.

Painting with Oils: Classes are organized for both beginners and more advanced students. Techniques used include brush and palette knife painting, color mixing, composition and design, canvas stretching. Types of painting include academic, impressionistic, expressionistic, abstract and modern. 33 hours.

Photography: Introduces the student to fundamental factors influencing the quality of image captured in the photograph. Students may study lighting, the primary subject, the field of view, color and camera techniques. 33 hours.

Porcelain: Advanced students will learn complete process of porcelain doll making as well as other porcelain items; pouring, cleaning greenware; cutting out eves and insertion; painting dolls; assembling and wigging. Some dressing instruction. Heritage heirloom instruction. Can produce (3) three dolls in class, 33 hours.

Prepared Childbirth: This class prepares the prospective mother emotionally, intellectually, psychologically, and physically for childbirth. Together, both prospective parents are actively involved in the birth of their child. Instruction includes techniques of body building exercises, stretching and breathing exercising, and neuro-muscular control (relaxation). 21 hours.

Sketching: An interesting and basic class for the art student who wishes to learn more about drawing simple shapes, one and two-point perspective drawing, and shadowing. Practice exercises with various drawing materials will be used. 33 hours.

Stained Glass: The course is designed to teach all techniques in cutting and fitting stained glass in the making of lamps, planters, decorative ornaments, jewel boxes, pictures, etc. 33 hours.

Tole Painting: An interesting technique, rather than talent, where patterns of decorative design are painted on tine, wood, glass and metal. Designs are stenciled on material and painted in acrylics or oils. The art of tole painting is the way the brush is held and turned to make details. 33 hours.

Water Colors: In this class art students will work with various materials and equipment, color mixing, using wet and dry paper, composition and design. Other techniques will include watercolor tricks, inks and calligraphy. 33 hours.

Woodworking: This course is designed to help the woodworking enthusiast in the use, care and safe practice of basic hand and power tools. Considerable time will be spent in the shop in practical use of skills learned. Woodworking projects completed by the student may be retained for personal use. 45 hours.

#### BASIC SKILLS PROGRAM

The Basic Skills Program provides a variety of educational experiences for adults by guiding them in the development of individual strategies to improve the necessary skills for coping with change in today's complex society.

Striving to meet the spectrum of needs of the College and the community, the staff of the Basic Skills Program provide flexibility within each program. The goal of the department is to assist participants as they strive to become independent learners and productive citizens.

Educational, cultural, economic and social needs are considered when students apply for various programs. Class sites are on campus and at various locations in Cleveland County.

Following are the programs and services available through the Basic Skills Programs:

Adult High School Diploma Program Adult Basic Education Program G.E.D. Preparatory Program and Examination Learning Lab Programs Human Resources Development Program English As A Second Language Compensatory Education Program

Adults, eighteen years of age or older, desiring to make application for any of the Basic Skills Programs should contact the appropriate departments for additional information.

#### ADULT BASIC EDUCATION PROGRAM

#### (Grades 1-8)

Adults who have less than a high school education may enroll in the Adult Basic Education Program. The program includes instruction in reading, writing, mathematics, social studies, science, and health education. In each of these areas, instruction is designed to assist students in meeting adult responsibilities by improving fundamental skills. Learning opportunities range from instruction for those who have received no formal education to those who have received as much as eight years of instruction.

Classes are organized into two groups. The first group is for those who need individual instructional guidance in basic reading and writing skills. In the second group, instruction is offered in reading and writing at a more advanced level than that of group one. The second group also receives instruction in basic science and social studies.

With successful completion of the subject matter taught in group two, the student may then advance into the high school program.

Students may enter ABE classes at any time. However, the staff recommends that individuals enter during the registration period at the beginning of each quarter. In order to take advantage of the complete program being offered, the College encourages students to maintain attendance in these classes over a period of several school quarters.

There is no registration fee for ABE classes. Classes are held on campus and at various locations throughout the county.

#### ADULT HIGH SCHOOL DIPLOMA PROGRAM

#### (Grades 9-12)

The Adult High School Program is a cooperative program between the College and the local school systems. It is available to Cleveland County adults who have passed the eighth grade or the Eighth Grade Equivalent Test and wish to complete the high school program. The successful completion of twenty units and a passing score on the North Carolina Competency Test are required for graduation from the Adult High School Program. Any previously earned high school units are usually accepted toward the total requirements. The program is free, although there may be a small fee for textbooks. A graduation fee is charged to each student completing the high school requirements. The graduate will be issued a diploma or certificate from the school district in which he or she lives.

Adult High School students may arrange a schedule to complete high school through the Learning Lab program or the classroom program on campus, or at various locations throughout the county. Interested persons may enroll in the Adult High School Program at any time.

Upon Completion of the Adult High School Program, graduates may enroll in one of the curriculum programs at Cleveland Community College or some other college.

# GENERAL EDUCATIONAL DEVELOPMENT (GED) PREPARATORY

The GED (high school equivalency) Preparatory Program is designed for adults preparing to take the GED examination. After the administration of the required Pre-GED examination, each student's academic skills are evaluated to determine specific instructional needs. The student primarily studies in the areas of English, reading

and math. After achieving specific skills and knowledge, the student is prepared to take the GED examination.

#### LEARNING LAB PROGRAM

The Learning Lab, located on the campus, includes free high school programs in addition to the free General Interest Programs. General Interest Programs are available for adults who have already completed high school or college work but who want to continue their educational development in a free non-credit curriculum.

For their own self-improvement and personal interest, many community residents choose self-instructional courses such as reading improvement, math or English.

Because there are no organized classes in the Learning Lab, the staff will assist the student in arranging a study schedule to meet his or her needs. The student may attend the hours and days which are most convenient for him or her. The Learning Lab is open from 8:00 AM to 10:00 PM, Monday through Thursday and 8:00 AM to 4:00 PM on Friday.

#### HUMAN RESOURCES DEVELOPMENT PROGRAM

The Human Resources Development Program provides prevocational training and counseling for unemployed and underemployed adults. Upon graduation, participants receive assistance with job placement or opportunities for skills training.

The goal of the Human Resources Development Program is to prepare persons for successful performance in the work force. The primary objective of the program is to reduce unemployment and underemployment by making it possible for the participants to become and remain productive employees.

Students in the Human Resources Development Program enroll for approximately eight weeks of instruction. The curriculum includes an orientation to the workplace, instruction in reading, writing and arithmetic skills, and instruction in human relations, which are essential to securing and maintaining employment.

Classes are held on campus from 8:30 AM to 12:30 PM, Monday through Friday.

#### ENGLISH AS A SECOND LANGUAGE

English language for the foreign born is taught as written English and as conversational English. Classes are free of charge to those seeking English language skills and citizenship instruction. Classes are available for refugees, migrant workers and other aliens.

#### COMPENSATORY EDUCATION PROGRAMS

The Compensatory Education Program provides classes in basic education, socialization, and community living skills for the adult mentally retarded.

This program is a cooperative effort through Cleveland County Mental Health, Cleveland Vocational Industries, Inc., Cleveland Community College, and other service provider agencies.

Certification of mental retardation is required prior to enrollment.

#### **SMALL BUSINESS CENTER**

The Small Business Center of Cleveland Community College provides workshops, seminars, counseling, information and referral services for small business owners and operators in Cleveland County. The Center's objectives are:

- \* To provide accessible and flexible training programs for small business operators including workshops, seminars, and continuing education courses.
- \* To provide a resource center of print and non-print reference materials for use by small business operators and employees.
- \* To offer special assistance to small business owners and wouldbe owners via a network of referral services to the chambers of commerce banks, the Small Business Administration, and other agencies such as the Department of Commerce.
- \* To offer consultative services on a direct one-to-one basis.

A variety of seminars have been presented including Managing Customer Complaint, Time Management, Effective Selling, Low Cost Advertising, Telephone Professionalism, and Tax Reform. For more information call the Small Business Center Director at 484-4040.

# LEARNING RESOURCES CENTER

Hours 7:30 a.m. - 10:00 p.m. Monday - Thursday 7:30 a.m. - 4:00 p.m. Friday

The Learning Resources Center (LRC) is a multimedia facility designed to support the total educational program at Cleveland Community College. The LRC includes two areas of service: Library Services and Audiovisual Services. The merger of these components provides a broad range of services to meet the instructional and individual needs of the students, beginning at his/her skill level and assisting in that student's development and improvement. These services also include support of the various programs of the college and the enhancement of the teaching/learning process for students, faculty, administration, and community patrons. The LRC staff offers both professional and technical assistance to meet the total institutional and community needs by the careful selection of instructional materials (both print and non-print) and by providing instructional materials in basic library skills and assistance for the students/patrons to most effectively use the materials available. The LRC provides opportunities for life-long learning to adults in the community. As well as providing materials that enhance the productive use of leisure time, the LRC has materials available which allow adults to improve and upgrade their skills for employment, either part-time or full-time. Citizens and students of Cleveland County may take advantage of the offerings and assistance by working at their own pace to teach themselves new skills

#### LIBRARY SERVICES

The library has a growing collection of approximately 26,331 volumes (at end of Summer Qtr. '92), most of which are related to the Degree and Diploma programs. The selection of materials is done in consultation with faculty, students, and administration. The library has a collection of local history materials that is used in conjunction with Continuing Education courses as well as for anyone who wishes to research local history and genealogy. The open shelf concept is used to encourage browsing and study. The library subscribes to approximately 260 periodicals. For better accessibility, the audio-visual collection is intershelved with the books.

#### **AUDIO-VISUAL SERVICES**

Functions of the audiovisual services section of the LRC include the coordination of AV instructional materials and equipment and media productions.

There are over 5,514 AV acquisitions in the collection including films, cassette tapes, slides, records, filmstrips, film loops, transparencies, video tapes, etc. The department maintains the most up-todate equipment for all software. This includes portable equipment which is used in the classroom as well as the closed circuit TV system that is available in sixty classrooms, the LRC, and various offices and lobbies as well.

The Audiovisual Department is responsible for the operation of the College's community cable access Channel 22, which began broadcasting September, 1982. The community cable channel provides capabilities for delivery of educational, cultural, and public service programming to approximately 10,000 cable subscribers. This includes Shelby, Boiling Springs, Polkville, Patterson Springs, Fallston, Lawndale and surrounding areas.

# CLEVELAND COMMUNITY COLLEGE

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David S. Banks (1994) John R. Schenck, III (1995)

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Elsie Enloe Foster (1994) R. Howard Bryant (1995)

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Community College)
Mike Wright
Robert W. Yelton
Dr. Dottie McIntyre
(Executive Director)
Susanne Studioso
(Recording Secretary)

#### PERSONNEL OF THE COLLEGE (FULL-TIME)

#### OFFICE OF THE PRESIDENT

President .....L. Steve Thornburg (1990) B.A.J., University of North Carolina at Chapel Hill M.P.A., University of North Carolina at Chapel Hill Ed.D., North Carolina State University in Raleigh

#### GENERAL ADMINISTRATION

Associate Vice President of College Relations/Development Executive Director, Cleveland Community A.A., Gardner-Webb College B.A., Limestone College M.A., University of North Carolina at Charlotte Ed.S., Appalachian State University CAGS, Ed.D., Virginia Polytechnic Institute and State University Director of Administrative Computing and Research and Planning ......Hugh Walker, Jr. (1973) A.A.S., Cleveland Technical College B.S., North Carolina State University M.A.Ed., Western Carolina University Advanced Study, Appalachian State University

#### **BUSINESS AFFAIRS**

| Vice President of Business AffairsJames E. Greene (1971) A.A., Gardner-Webb College B.S., Limestone College M.A., Appalachian State University |
|--|
| Comptroller/Office Manager   |
| Bookkeeper   |
| Security Officer   |
| Purchasing Officer   |

B.S., Limestone College

| Bookstore Manager  | Lydia McSwain (1986)    |
|--|-------------------------|
| Printshop Operator/Mail Room Clerk   | Danny Dedmon (1986)     |
| INDUSTRY AND COMMUNITY   | SERVICE                 |
| Vice President of Industry and Community Service  B.S., North Carolina State University M.A., Appalachian State University Doctoral Studies, North Carolina State University |                         |
| Dean of Continuing Education David<br>B.S., North Carolina State University<br>M.A.Ed., Western Carolina University<br>Ed.S., Western Carolina University                    | M. (Pete) Stamey (1973) |
| Director of Continuing Education   | John Kilby (1975)       |
| Director of Small Business Center  | Barbara Greene (1989)   |
| Director of Prison Program   | Donald Smith (1967)     |
| GED Testing Coordinator  | William Jones (1973)    |
| Emergency Services Coordinator   | Bob Watson (1992)       |
| Dean of Skills Development Programs  |                         |
| Basic Skills Programs Coordinatorh B.S., Gardner-Webb College  |                         |
| Basic Skills Records Coordinator<br>B.A., Meredith College<br>M.A.Ed., Western Carolina University   | Louise H. Martin (1974) |

| Basic Skills Learning Lab CoordinatorW. Cobern Pruitt (1976) B.S., Western Carolina University M.A., Western Carolina University Ed.S., Western Carolina University Doctoral Studies, University of North Carolina at Greensboro |  |  |
|--|--|--|
| Recruiter/Computer Lab CoordinatorNancy N. Hopper (1976) A.A.S., Cleveland Technical College B.S., Gardner-Webb College Queens College M.A., Appalachian State University  |  |  |
| Coordinator, HRD Program   |  |  |
| HRD Recruiter/ InstructorJoyce Hosch (1979) A.A.S., Cleveland Technical College B.S., Gardner-Webb College   |  |  |
| ACADEMIC PROGRAMS  |  |  |
| Vice President of Academic Programs  |  |  |
| Dean of Arts, Sciences, and Public ServicesRonald Wright (1973) A.A., Gardner-Webb College B.A., Gardner-Webb College M.A., Western Carolina University Ph.D., University of South Carolina                                      |  |  |
| Dean of Business Technologies  |  |  |
| Dean of Vocational and Engineering Technologies  |  |  |
| Dean of Learning Resources/Affirmative  Action Officer   |  |  |

| Director of Library Services  |
|---|
| Director of Channel 22 and Communications Technology Instructor   |
| Coordinator of Audiovisual ServicesDanny Wray Morton (1986) A.A., Isothermal Community College University of North Carolina at Charlotte A.A.S., Cleveland Technical College              |
| Graphics/Photo Coordinator  |
| STUDENT SERVICES  |
| Vice President for Student Services Sandra W. Hardin (1970) B.B.A., University of Houston M.A.Ed., Western Carolina University  |
| Dean of Enrollment Management LouAnn Bridges (1976) A.A.S., Cleveland Technical College B.S., Gardner-Webb College M.A., Gardner-Webb College University of South Carolina at Spartanburg |
| Director of Financial Aid and Veterans AffairsAlan Price (1976) B.S., Western Carolina University M.A., Appalachian State University  |
| Admissions Counseler  |
| Director of Testing, Student Activities, Job Placement, and Alumni Affairs  |
| CLERICAL STAFF  |
| Secretary, President's Office   |
| Secretary, Academic Programs Lee Bryant (1976)  A.A.S., Cleveland Technical College  A.G.F. Cleveland Technical College   |

| Secretary, ReceptionistSeverne L. Budd (1992) B.S., Livingston College   |
|--|
| Secretary, Continuing Education  |
| Secretary, Business OfficePhyllis Champion (1987) A.A.S., Cleveland Community College  |
| Secretary, Academic Programs   |
| Computer System Technician Phyllis Haynes (1985) A.A.S., Cleveland Community College   |
| Secretary, Evening ReceptionistBillie Jenks (1977) Shelby Business College A.A.S., Cleveland Technical College Gardner-Webb College          |
| Secretary, Student ServicesAudrea Jimson (1993) Cleveland Community College  |
| Secretary, Small Business Center and Continuing EducationSusan Martin (1990) Western Carolina University A.A.S., Cleveland Community College |
| Applications/Transcript CoordinatorPearl J. Mauney (1986) A.A.S., Cleveland Technical College B.S., Gardner-Webb College                     |
| Secretary, Vocational and Engineering Technologies   |
| Secretary, Financial Aid   |
| Secretary, Learning Resources Shirley Rodriguez (1976) A.A.S., Cleveland Technical College B.S., Limestone College                           |
| Secretary, Student ServicesAngela Rudd (1992) B.A, Emory and Henry College   |
| Records Processing Technician  |
| Secretary, College Relations/ Development  |

## HOUSEKEEPING AND MAINTENANCE STAFF

| Supt. of Buildings and Grounds | Carroll Hamrick (1982)     |
|--------------------------------|----------------------------|
| Housekeeping Supervisor        | Gene Lail (1993)           |
| Maintenance                    | Terry Toney (1990)         |
| Maintenance                    | Keith Willis (1989)        |
| Housekeeper                    | Dorothy Linda Black (1977) |
| Housekeeper                    |                            |
| Housekeeper                    | Jessie J. Lott (1975)      |
| Housekeeper                    | Ronnie Moon (1991)         |
| Housekeeper                    | Barbara Smarr (1988)       |
| Housekeeper                    | Dorothy Surratt (1976)     |
| Housekeeper                    | Lucille Wilson (1992)      |
| Housekeeper                    | Patricia Wilson (1976)     |

## **FACULTY**

| Alex Alexander (1979) Instructor-Food Service, Prison Program John Hopkins University Johnson and Wales Culinary Arts College University of North Carolina at Greensboro A.A.S., Cleveland Technical College B.S., Western Carolina University Queens College   |
|---|
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| Hal Bryant, Jr. (1975)Instructor-Art B.A., Gardner-Webb College M.A., University of South Carolina at Columbia  |
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| Ray Fisher (1977) Program Coordinator-Electrical Installation and Maintenance A.A., Gaston College  |
| B.S., Western Carolina College  |

| James Walter Fite (1975)   |
|--|
| Jean Francis (1971)  |
| Woodrow Glenn (1976)   |
| Paula Greene (1992)  |
| Julie Holt (1992)  |
| Rosalyn Hunt (1976)Instructor-General Education, Prison Program B.S., Fayetteville State University Western Carolina University M.A., Appalachian State University Ed.S., Appalachian State University |
| Bo Jones (1973)  |
| Katherine Jones (1975) Department Head-Practical Nurse Education   |
| A.A., Gardner-Webb College R.N., Rex Hospital School of Nursing B.S.N., North Carolina Wesleyan College M.S.N., East Carolina University   |
| Patty Lawing (1992)Instructor-Nursing B.S.N., Western Carolina University  |
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| Doug Lovelace (1993)   |

|            | our McBride (1975)  |
|------------|---|
|            | North Carolina at Chapel Hill   |
| ,<br>      | d McFarland (1970)Instructor-Accounting A.A., Gardner-Webb College B.A., Carson-Newman College M.A., Appalachian State University     |
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| Joyc       | ce Meade (1973) Department Head-Business Administration,<br>Secretarial, and Fashion  |
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|            | ky W. Parrish (1990) Fashion Merchandising-Retail Marketing<br>Technology Coordinator   |
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| ı          | k Polk (1992)Department Head, Criminal Justice B.A., Appalachian State University 24 years experience in the U.S. Army Special Forces |

Maintenance-Prison Program

Bill Quarles (1990) ..... Instructor-Psychology and Religion/Counselor B.A., Baptist College M.R.E., Southeastern Seminary University of North Carolina M.A., Appalachian State University M.DIV., Erskine Theological Seminary Roger Randall (1979) ......Program Coordinator-Auto Body Shop National Institute Automotive Service Excellence Certification 21 years experience in automotive service B.S., Western Carolina University Kay Rast (1982) ......Instructor-Microcomputer Systems Technology University of Georgia Georgia State University B.S., Gardner-Webb College Charles D. H. Reynolds (1982) ...... Instructor-English B.A., Williams College M.A., University of Chicago Ph.D., University of Nebraska Northwestern University University of California at Berkeley Rhode Island School of Design Maxine Romney (1976) ...... Instructor-Business Administration B.B.A., City University of New York M.Ed., Northeastern University Linda Ross (1978) ...... Instructor-Business Administration LPN Diploma, A.A.S., Cleveland Technical College B.A., Limestone College M.S., North Carolina A and T University North Carolina State University Winthrop College

Franklin Pullen (1971) ...... Instructor-Health & Physical Education

Robert Putnam (1984) ......Instructor-Electrical Installation and

B.S., North Carolina A and T University

North Carolina Vocational Textile School

M.A., University of Rhode Island

22 years electrical experience B.S., Western Carolina University

Rhode Island College Appalachian State University

| JoAnn Schilling (1977)Department Head-Radiologic Technology R.T., Lewis-Gale Hospital School of Radiologic Technology B.G.S., University of South Carolina M.A.Ed., Western Carolina University Ed.S., Appalachian State University |
|---|
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| Joseph M. Southards (1981) Department Head-Math and Science<br>B.S., Gardner-Webb College<br>M.A., Appalachian State University   |
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## **INDEX**

| Academic Advising                              | 30  |
|--|-----|
| Academic Regulations                           | 22  |
| Academic Placement Tests                       | 30  |
| Academic Programs                              | 14  |
| Degree Credit Programs                         | 53  |
| College Transfer Credit                        |     |
| College Transfer Programs                      |     |
| Associate of Arts Degree                       |     |
| Pre-Business                                   |     |
| Pre-Education: Early Childhood/Elementary      |     |
| Pre-Education: Intermediate/Secondary          |     |
| Pre-Liberal Arts                               |     |
| Associate of Science Degree                    |     |
| Pre-Science                                    |     |
| Associate of General Education Degree          |     |
| Associate in Applied Science Degree Programs   |     |
| Accounting                                     |     |
| Administrative Office Technology               | 109 |
| Associate Degree Nursing (RN)                  |     |
| Business Administration                        |     |
| Communications Technology                      |     |
| Criminal Justice                               |     |
| Electronics Engineering Technology             |     |
| Fashion Merchandising and Marketing            |     |
| General Office                                 |     |
| Industrial Management                          |     |
| Medical Office Technology                      |     |
| Microcomputer Systems Technology               |     |
| Radiologic Technology                          |     |
| Real Estate (Technical Specialty)              |     |
| Diploma Programs                               |     |
| Air Conditioning-Heating-Refrigeration         |     |
| Auto Body Repair                               |     |
| Automotive Mechanics                           |     |
| Residential Carpentry                          |     |
| Cosmetology (Certificate)                      | 137 |
| Electrical Installation                        | 138 |
| Food Service Specialist (Prison Program Only)  | 141 |
| Industrial Maintenance                         | 143 |
| Machinist                                      | 146 |
| Plumbing and Pipefitting (Prison Program Only) | 149 |
| Practical Nurse Education (LPN)                | 153 |
| Welding  | 151 |
|  |     |

| Academic Progress                           | 24  |
|---|-----|
| Accreditation                               | 10  |
| Administration                              | 210 |
| Admissions                                  | 15  |
| Admissions Procedures                       | 17  |
| Admissions-Provisional                      |     |
| Readmission                                 |     |
| Advanced Placement                          |     |
| Alumni                                      |     |
| Americans with Disabilities Act             |     |
| Athletics/Sports                            |     |
| Audit                                       |     |
|   |     |
| Basic Skills Programs                       |     |
| Board of Trustees                           | 209 |
| Calendar of Events                          | 2   |
| Career Center                               |     |
| Career Guidance                             |     |
| Children on Campus                          |     |
| Class Attendance Policy                     |     |
| •   |     |
| CLEP  |     |
| Cleveland Community College Foundation, Inc |     |
| College Store (Bookstore)                   |     |
| College Workstudy Program                   |     |
| Communicable Disease Policy                 |     |
| Continuing Education                        |     |
| Course Descriptions                         |     |
| Course Load                                 |     |
| Course Repeat Regulation                    |     |
| Credit by Exam                              |     |
| Credit for Experiential Learning            |     |
| Crime Awareness/Campus Security Act         | 12  |
| Dean's List-President's List                | 23  |
| Developmental Courses                       |     |
| Drop-Add Period                             |     |
| Drug-Free Workplace Policy                  |     |
| Due Process                                 |     |
| Duc 1 100033                                |     |
| Financial Aid Information                   | 45  |
| Financial Information                       | 41  |
| Our aline of Contains                       | 00  |
| Grading System                              |     |
| Graduation Fee                              |     |
| Graduation Honors                           |     |
| Graduation Requirements                     | 2/  |

| History of the College  | 32       |
|---|----------|
| Inclement Weather   |          |
| Job Placement   |          |
| Learning Resources Center                                       |          |
| Military Experience   |          |
| Nondiscrimination Policy  |          |
| Orientation   |          |
| Outstanding Student Awards                                      |          |
| Parking Regulations   | 43       |
| Personal Counseling   | 30       |
| Personnel of the College  |          |
| Quality Point Average   |          |
| -   |          |
| Release of Information from Records                             |          |
| Retention and Disposal of Records                               |          |
| Returned Checks   | 43       |
| Servicemembers Opportunity Colleges                             |          |
| Sexual Harassment Policy  |          |
| Snackbar  |          |
| Special Credit Classification                                   | 17       |
| Student Activities Center                                       |          |
| Student Behavior  |          |
| Student Code of Conduct   |          |
| Student Government Association                                  |          |
| Student HealthStudents of the Quarter                           |          |
| Students of the Quarter   |          |
| Students' Rights  | 37       |
| Student's Role in Decision Making                               |          |
| Student Services  |          |
| TranscriptTransfer Credit Information                           | 30<br>18 |
| Veterans' AffairsVisitors                                       |          |
| Who's Who Among Students In American Junior Colleges Withdrawal | 40       |

## **NOTES**





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