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# PITT COMMUNITY COLLEGE 

Greenville<br>North Carolina

Recognized and Approved By North Carolina State Board of Community Colleges North Carolina State Board of Nursing<br>Radiologic Technology Joint Review Committee of the American Medical Association<br>Accredited by Southern Association of Colleges and Schools

ARCHIVES

## CATALOG OF COURSES <br> DAY AND EVENING PROGRAMS

Volume XI
1982-84


Pitt Community College publishes this catalog to provide students and other interested persons with information about the College and its programs.

The provisions of the catalog are not to be regarded as an irrevocable contract between students and Pitt Community College. Every effort will be made to minimize the inconvenience such changes create for students. The College reserves the right to change any provisions, requirements, or schedules at any time or to add or withdraw courses or program offerings.

Students having questions not answered in this publication may secure additional information from the Dean of Students, Pitt Community College, P. O. Drawer 7007, Greenville, North Carolina 27834; telephone: (919) 756-3130.

It is the policy of Pitt Community College not to discriminate against any person on the basis of race, color, handicap, sex, religion, age, or national origin in the recruitment and admission of students; the recruitment, employment, training, and promotion of faculty and staff; and the operation of any of its programs and activities, as specified by federal laws and regulations.
Pitt Community College is an equal opportunity / affirmative action institution.


## PRESIDENT'S MESSAGE

Welcome to Pitt Community College. We are delighted that you are interested in our College and look forward to this opportunity to serve you. Our wide range of courses and programs, designed with learning experiences to provide a practical education, will help you become a more productive individual in your chosen field.

This catalog provides you with a detailed description of the College's requirements, procedures, and offerings. What it cannot convey, however, is the satisfaction that comes from attending Pitt Community College where the staff and faculty have a genuine concern for the welfare and future success of its students. The opportunity is here for you. I urge you to take full advantage of the College's total resources in the development of your abilities in your chosen field.


Dr. William E. Fulford, Jr. President

## TABLE OF CONTENTS

ACADEMIC CALENDAR ..... 8
ORGANIZATION ..... 12
Board of Trustees ..... 12
Office of the President ..... 13
Office of Instruction ..... 13
Learning Resources Center ..... 13
Learning Center ..... 14
Office of Student Services ..... 14
Office of Fiscal Affairs ..... 14
Maintenance Staff ..... 15
Special Staff ..... 15
Instructional Staff ..... 15
GENERAL INFORMATION ..... 19
History of the College ..... 20
Location ..... 20
Statement of Purpose ..... 20
Areas of Study ..... 21
Associate in Applied Science Degree ..... 21
Diploma ..... 22
Certificate ..... 22
Associate in Arts Degree ..... 22
Special Credit ..... 22
ADMISSIONS ..... 24
General Admissions ..... 24
Allied Health Curricula Admissions ..... 24
Transfer Admissions ..... 26
Readmission of Curricular Students ..... 26
Provisional Admissions ..... 26
High School Admissions (Dual Enrollment) ..... 26
International Student Admissions ..... 27
TUITION, FEES AND OTHER EXPENSES ..... 27
Tuition
27
27
Full-Time Students ..... 27
Part-Time Students
27
27
Senior Citizens
28
28
Audit Students
Audit Students
28
28
Out of State Students
28
28
Residence Classification for Tuition Purposes
28
28
Fees and Other Expenses
28
28
Student Activity Fee
28
28
Accident Insurance Fee .....
28 .....
28
Parking Fee
Parking Fee
29
29
Textbooks and Supplies
Textbooks and Supplies ..... 29
Lab Fees for EDP Courses
29
29
Refund Policy ..... 29
ACADEMIC REGULATIONS ..... 30
Registration ..... 30
Preregistration and Prepayment ..... 30
Late Registration ..... 30
Auditing Courses ..... 30
Dropping and/or adding Courses ..... 31
Withdrawal from Classes ..... 31
Official Withdrawal ..... 31
Unofficial Withdrawal ..... 32
Credit by Examination ..... 32
Challenge Examination ..... 33
Transfer Credit ..... 33
Grade Point Average ..... 34
Dean's List and Honor Roll ..... 34
Grading System ..... 35
Incomplete ..... 35
Removal of Incomplete ..... 35
Academic Probation and Suspension ..... 36
Standards of Academic Progress Scale ..... 37
Transcripts ..... 37
Transfer to Other Institutions ..... 37
Course Load ..... 38
Attendance ..... 38
Class Schedule ..... 39
Changes in Regulations ..... 39
Change in Major Course of Study ..... 39
Student Classifications ..... 39
Graduation Requirements ..... 40
Catalog of Record ..... 40
Repetition of Course Work ..... 41
FINANCIAL AID ..... 41
Grants ..... 41
Loans ..... 42
Scholarships ..... 44
Work Study ..... 45
Other Sources ..... 45
FACULTY ADVISOR SYSTEM ..... 47
STUDENT SERVICES/INFORMATION ..... 48
Counseling ..... 48
Placement ..... 48
Health ..... 49
Food ..... 49
Housing ..... 49
Student Government Association ..... 49
Identification Cards ..... 49
Gamma Beta Phi ..... 50
Student Publications ..... 50
Guided Tours ..... 50
Class Rings ..... 50
Traffic Regulations ..... 50
Inclement Weather ..... 50
Fire Drills ..... 51
Student Rights and Responsibilities ..... 51
Disciplinary Action ..... 51
Student Conduct ..... 51
Due Process ..... 51
Dismissal ..... 52
LEARNING RESOURCES CENTER ..... 52
COOPERATIVE EDUCATION ..... 53
CONTINUING EDUCATION ..... 54
COLLEGE TRANSFER ..... 61
Pre-Business Administration ..... 63
Pre-Education (Secondary) ..... 65
Pre-Liberal Arts ..... 67
TECHNICAL EDUCATION ..... 69
Accounting ..... 70
Agricultural Business Technology ..... 72
Agricultural Chemicals Technology ..... 74
Agricultural Science ..... 76
Agricultural Science and Mechanization (Technical Specialty) Veterans Farm Cooperative Program ..... 78
Air and Water Technology ..... 80
Architectural Drafting Technology ..... 82
Banking and Finance ..... 84
Business Administration ..... 86
Career Option Nursing Education ..... 88
Commercial Art and Graphic Design ..... 91
Criminal Justice: Corrections ..... 93
Criminal Justice: Law Enforcement ..... 95
Early Childhood Associate ..... 97
Educational Associate ..... 99
Electronic Data Processing: Business ..... 101
Electronics Engineering Technology ..... 103
Energy Technology ..... 105
General Office Technology ..... 107
Human Services Technology ..... 109
Industrial Maintenance Technology ..... 111
Industrial Management Technology ..... 113
Medical Secretary: Machine Transcription Option ..... 115
Shorthand Option ..... 117
Paralegal Technology ..... 119
Radiologic Technology ..... 122
Secretarial Science ..... 124
VOCATIONAL EDUCATION ..... 127
Air Conditioning, Heating, and Refrigeration ..... 128
Automotive Mechanics ..... 130
Carpentry and Cabinetmaking ..... 132
Cosmetology ..... 133
Electrical Installation and Maintenance ..... 134
Electronic Servicing ..... 136
Farm Machinery Mechanics ..... 138
Industrial Maintenance: Electromechanical ..... 139
Machinist ..... 141
Masonry ..... 143
Practical Nurse Education ..... 144
Surgical Technology ..... 146
Teacher Assistant ..... 147
Welding ..... 148
CERTIFICATE PROGRAMS ..... 150
Hospital Ward Clerk ..... 150
Nurse Assistant ..... 150
Surveying (Technical Specialty) ..... 150
COURSE DESCRIPTIONS ..... 153
MAP ..... 248


## ACADEMIC CALENDAR 1982-83

## FALL QUARTER

Faculty Orientation and Registration:Day and EveningWednesday, September 1Registration: Day and Evening Evening Classes Begin Thursday, September 2
Day Classes and Drop/Add Begin Friday, September 3
Labor Day Holiday ..... Monday, September 6
Last Day and Evening to Drop/Add Wednesday, September 8
Last Day to Officially WithdrawWithout Valid ReasonFriday, October 1
Preregistration and Prepayment for Winter Quarter:Day ClassesMonday thru Friday, October 25 thru 29
Preregistration and Prepayment for Winter Quarter:
Evening Classes Monday \& Thursday, October 25 \& 28
Last Day to Remove Incompletes Friday, October 29
Last Day of Classes Friday, November 19
WINTER QUARTER
Registration: Day and Evening Monday, November 29
Day and Evening Classes and Drop/Add Begin Tuesday, November 30
Last Day and Evening to Drop/Add Thursday, December 2
First Day of Christmas Holidays Monday, December 20
Classes Begin After Christmas Holidays Monday, January 3
Last Day to Officially WithdrawWithout Valid ReasonMonday, January 10
Preregistration and Prepayment for Spring Quarter:
Day ClassesMonday thru Friday, February 7 thru 11
Preregistration and Prepayment for Spring Quarter:
Evening Classes Monday \& Thursday, February 7 \& 10
Last Day to Remove Incompletes Monday, February 7
Last Day of Classes Monday, February 28
SPRING QUARTER
Registration: Day and Evening Monday, March 7
Day and Evening Classes and Drop/Add Begin Tuesday, March 8
Last Day and Evening to Drop/Add Thursday, March 10
Easter Holiday ..... Friday, April 1
Easter Holiday Monday, April 4
Last Day to Officially WithdrawWithout Valid Reason
Wednesday, April 6
Preregistration and Prepayment for Summer Quarter:
Day ClassesMonday thru Friday, May 2 thru 6
Preregistration and Prepayment for Summer Quarter:
Evening Classes
Last Day to Remove Incompletes
Monday \& Thursday, May 2 \& 5
Last Day of Classes Wednesday, May 25
GraduationThursday, May 26

## ACADEMIC CALENDAR 1982-83 (Cont'd)

## SUMMER QUARTER

Registration Summer Quarter and
First Summer Session: Day and Evening ................ . Tuesday, May 31
Day and Evening Classes and Drop/Add Begin ....... Wednesday, June 1
Last Evening to Drop/Add . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Thursday, June 2
Last Day to Drop/Add . ........................................... . . Friday, June 3
Last Day to Officially Withdraw
Without Valid Reason .................................... Tuesday, June 28
Independence Day Holiday .................................. . . Monday, July 4
First Summer Session Ends . ....................................... . Friday, July 8
Summer Break ......................... . Monday thru Friday, July 11 thru 15
Registration Second Summer Session ....................... . Monday, July 18
First Day of Classes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Tuesday, July 19
Last Day to Drop/Add . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Thursday, July 21
Last Day to Remove Incompletes .................... Wednesday, August 3
Preregistration and Prepayment for Fall Quarter:
Day Classes .................... Monday thru Friday, August 1 thru 5
Preregistration and Prepayment for Fall Quarter:
Evening Classes ...................... Monday \& Thursday, August 1 \& 4
Last Day of Classes .................................... Wednesday, August 24
Graduation ................................................. Thursday, August 25


## ACADEMIC CALENDAR 1983-84

## FALL QUARTER

Faculty Orientation and Registration:
Day and Evening Wednesday, August 31
Registration: Day and Evening Evening Classes Begin Thursday, September 1
Day Classes and Drop/Add Begin Friday, September 2 Friday, September 2
Labor Day Holiday Monday, September 5
Last Day and Evening to Drop/Add Wednesday, September 7
Last Day to Officially WithdrawWithout Valid ReasonFriday, September 30
Preregistration and Prepayment for Winter Quarter:
Day Classes Monday thru Friday, October 24 thru 28
Preregistration and Prepayment for Winter Quarter:
Evening Classes Monday and Thursday, October 24 \& 27
Last Day to Remove Incompletes Friday, October 28
Last Day of Classes Friday, November 18
WINTER QUARTER
Registration: Day and Evening ...................... . Monday, November 28
Day and Evening Classes and Drop/Add Begin Tuesday, November 29
Last Day and Evening to Drop/Add Thursday, December 1
First Day of Christmas Holidays Monday, December 19
Classes Begin After Christmas Holidays Monday, January 2
Last Day to Officially Withdraw Without Valid Reason Monday, January 9
Preregistration and Prepayment for Spring Quarter:
Day Classes ................... Monday thru Friday, February 6 thru 10Preregistration and Prepayment for Spring Quarter:
Evening Classes Monday \& Thursday, February 6 \& 9
Last Day to Remove Incompletes Monday, February 6
Last Day of Classes Monday, February 27
SPRING QUARTER
Registration: Day and Evening Monday, March 5
Day and Evening Classes and Drop/Add Begin Tuesday, March 6
Last Day and Evening to Drop/Add Thursday, March 8
Last Day to Officially Withdraw
Without Valid Reason Wednesday, April 4
Easter Holiday Friday, April 20
Easter Holiday Monday, April 23
Preregistration and Prepayment for Summer Quarter:
Day Classes Monday thru Friday, April 30 thru May 4Preregistration and Prepayment for Summer Quarter:Evening ClassesMonday \& Thursday, April 30 \& May 3
Last Day to Remove Incompletes Wednesday, May 2
Last Day of Classes Wednesday, May 23
GraduationThursday, May 24

## ACADEMIC CALENDAR 1983-84 (Cont'd)

## SUMMER QUARTER




## ORGANIZATION

## BOARD OF TRUSTEES

C. W. Everett, Sr.

Chairman
Mrs. Kay V. Whichard
Vice Chairman
R. E. Davenport, Jr. Max R. Joyner G. Henry Leslie Henry C. Oglesby Raymond Reddrick

Corey Stokes
Joseph M. Taft
William F. Tyson
Vernon E. White
A. B. Whitley, Jr.

## PITT COUNTY BOARD

 OF COMMISSIONERS| Kelly Barnhill | R. L. Martin |
| :--- | :--- |
| B. Alton Gardner | Bruce Strickland |
| Charles P. Gaskins | Burney L. Tucker |

## OFFICE OF THE PRESIDENT

William E. Fulford, Jr., Ed.D. President
Charles E. Russell, Ed.D. Assistant to the President
Mary K. Langston Secretary to the PresidentRachel B. Davis ............ Secretary to Assistant to the PresidentJames H. Young, Ed.D. ..... Director of Institutional DevelopmentTerri R. Little .............. Secretary for Institutional DevelopmentEarl L. Keel, A.A.S. ............................. . Chief Security OfficerEarl L. Aiken, A.B. . . . . . . . . . . . . . . . . . . . Public Information OfficerElizabeth L. Mallory, A.A.S. ............ Switchboard Operator andReceptionist
OFFICE OF INSTRUCTION
Edward B. Bright, Ed.D. ......................... Dean of Instruction Joseph E. Downing, M.S. ......... Assistant Dean of Instruction for Curricular Programs
Willard C. Finch, M.A. . .............. . Assistant Dean of Instruction Ola L. Porter, M.A. . . . . . . . . . . . . . Assistant Dean of Instruction for Continuing Education James W. Brown, M.A. . . . . . . . Director of General Adult Education Tommy D. Joyner, B.S. . . . . . . . . . . . . Director of Evening Programs M. Theresa Shank, M.A.Ed. . . . . Director of Cooperative Education William C. Stokes, A.B. . . . . . . . . Director of Occupational Extension Mary Outterbridge, B.S. . . . . Coordinator of Adult Basic Education Jack Robinson, A.A.S. . .......... Coordinator of Cooperative Skills Training Program
Louise B. Downing, M.M. Supervisor of Workshops and Seminars
Deborah H. Beddard ... Secretary, Continuing Education Division Sammie K. Eure .......... Secretary, Assistant Dean of Instruction for Curricular Programs Linda J. Fleming ........ Secretary, Continuing Education Division Louise Pritchard, A.A.S. ........ . Secretary, Cooperative Education Judith M. Smith ........... . Secretary, Dean of Instruction's Office Lisa Stone ................ Secretary, Assistant Dean of Instruction for Curricular Programs Joyce Williams ......... Secretary, Continuing Education Division
LEARNING RESOURCES CENTER
Barbara C. Clark, Ed.D.Assistant Dean of Instruction forLearning Resources
Kenneth L. Hilton, M.L.S. Librarian and Director of Audiovisualand Media Production Services
Carolyn S. Smith, M.L.S. Librarian and Coordinatorof Library Services
John L. Griffin, B.F.A. Instructional Designer andMedia Production Specialist
Bruce DolinAudiovisual Equipment Technician
Patricia F. Casper, Diploma LRC Acquisitionist/Bookkeeper and Secretary to the Assistant Dean of Instructionfor Learning Resources
Mary K. Godley, A.A.S. LRC Technical Assistant
Rita B. Harris, A.A.S.

## LEARNING CENTER


#### Abstract

Joy B. Sasser, M.A.Learning Center CoordinatorSidney M. Posey, A.A.S. .... Assistant Learning Center CoordinatorRudy Lloyd, A.A.S. . . . . . . . Assistant Learning Center Coordinator


OFFICE OF STUDENT SERVICESEdgar L. Boyd, M.Ed.Dean of Students
Norma S. Barrett, M.S. Director of Counseling
Sylvia Corey, A.A.S. Director of Admissions and Records
James O. Deans, M.A. Counselor
Yvonne George, M.S. ..... Counselor
Kathy Kinlaw, B.A. Assistant Registrar
Ernest L. Quinn Veterans Affairs Officer andAssistant Financial Aid Officer
Nancy Taylor Financial Aid Officer
Gail Wallace, M.A. Placement OfficerConnie Wrenn, B.A.Counselor
Marietta Williams, A.A.S. ..... Encoder
Sally Allen Secretary, Financial Aid
Mitzi Bromberg, A.A.S. Secretary, Directory of Admissions
Donna Arnold, A.A.S. Secretary, Financial AidJean King .............................. Secretary, Dean of StudentsKathy Ruffin, A.A.S.
Secretary, Counselors
OFFICE OF FISCAL AFFAIRS
William H. Howell, M.S. Dean of Fiscal Affairs
Connie S. Harrell, A.A.S. Comptroller
Doris D. Baker, A.A.S. Purchasing OfficerFrances D. Elks .............. Batching Clerk and Central SupplyStore ManagerClifton J. Moss, A.A.S. . . Equipment and Inventory Control OfficerAlberta M. Moye ................. Secretary, Dean of Fiscal Affairs
Helen J. Vandiford Accountant
Janice McGowan, B.S Accountant
Susan Counterman, A.A.S. Computer Operator
Byron Dickens, B.S. Bookstore Manager
Judy Harris Secretary, Bookstore
Jenny Edwards, A.A.S Accountant
Brenda Williams, A.A.S. Accountant
Rudy Ross Mail Clerk and Maintenance
Paul Suggs Graphic Arts Technician
Brenda Smith, A.A.S. Graphic Arts Technician
MAINTENANCE STAFF
William Dinkins, A.A.S. Superintendent of Buildings and Grounds
C. J. Best Maintenance Engineer
Owen Burney Maintenance Engineer
Douglas Jobes, A.A.S. Maintenance Engineer
Ella Mae Barnhill Maintenance
Albert L. Crandell Maintenance
Ernest L. White Evening Supervisor
Jesse Whitehurst Maintenance
Betty P. Strong Maintenance
William Taylor Strong Maintenance
David L. Carmon Maintenance
Farley Ebron Maintenance
Norwood Garris Maintenance
Terry Green MaintenanceJames Wrenn ............................................... . Maintenance
SPECIAL STAFF
Hazel Barrow ....................... Instructor, Human Resources Development Program
Charles M. Dickens, M.A. Coordinator of Human ResourcesDevelopment Program
A. J. Tyson, B.A. Instructor, Human Resources Development Program
Carolyn H. Stephenson, A.A.S.Secretary, TRIOIrene Hanifer, M.A.Ed.Principal, Pitt CountyExtended School

## INSTRUCTIONAL STAFF

*J. Kelly Adams, M.F.A. Commercial Art and Graphic Design
J. Sam Arnett, M.A. Architectural Drafting
Sally A. Barnaby, B.S.N. Nursing EducationFrances T. Bennett, B.S.N. Nursing Education
*William Roy Boyd, DiplomaCheryl Brandon, B.A., M.A.Michael Bridgers, M. S.English and Social ScienceTRIO
Lanny Joe Brittain, CertificateIndustrial Maintenance:Electromechanical*James T. Brooks, DiplomaCarpentry and Cabinetmaking
Angela Buck, B.S.N. Angela Buck, B.S.N. Nursing Education
Catherine S. Bullock, M.Ed. English and Social ScienceAnn B. Byrd, M.A.Business Education
Glenda H. Carawan, B.S.B.A.E., M.A.Ed. Business EducationJohn Cayton, M.A.TRIO
*Dale Chalmers, Licensed Cosmetologist Cosmetology
*Gayle Cobb, B.S.N. Surgical Technology
Charissa Colclough, B.S.N. Nursing Education
*Philip J. Costello, M.A. Air and Water
Louise R. Cox, R.T.-R Radiologic Technology
Julia D. Craft, B.S.N. Nurse Assistant, Hospital Ward Clerk*Lyman C. Craft, CertificateFarm Machinery Mechanics
James A. Creech, M.S. Business Education
*Susan H. Creech, M.S.H.E., M.A.Ed Teacher Assistant, EarlyChildhood Associate, Educational Associate
Mary Daughtry, A.A.S. Business Education
Faye H. Dempsey, M.A.Ed. Business Education
Larry C. Dendy, M.P. Math and Science
Elaine Denton, M.A. Business EducationMath and Science
Patricia S. Earnhardt, B.S.N. Nursing Education
*Margaret J. French, M.S. Human Services
*James E. Fulcher, Apprentice School Diploma MachinistKay H. Galloway, B.S.Preschool Laboratory
Kay Elizabeth Gladson, M.A. English and Social Science
*James A. Harris, Diploma Masonry
Gene D. Hemby, B.S. Machinist
Martha Hester, M.A. English and Social Science
Jean Holley, M.A.Ed. Business Education
*James N. Hoover, M.S. Electronics Engineering
Bryon W. Horton, M.A.
*Lloyd F. Huggins, A.B.Math and Science
*John C. Hutchens, M.A.Criminal Justice, ParalegalneJudith Kasperek, B.A., M.T. ...................... Nursing Education
*Marcus C. King, B.S. Energy Technology*Judith W. Kuykendall, B.S.N., M.S.Nursing EducationJames H. Land, A.A.S. ....... Electronic Data Processing: Business*Roy Lanier, A.A.S.Welding
Linda C. Leighty, M.A., M.S. English and Social Science
${ }^{*}$ JoAnn Leith, M.A. Business Education
Carla Lewis, B.S.N. Nursing Education
Chester K. Lilly, M.S. Air and Water
Judith Kasperek, B.A., M.T. Math and Science
Melinda Newell, M.F.A. Commercial Art and Graphic Design
Jan Maclaga, B.S.B.A. Electronic Data Processing: Business
Tom Marsh, M.A.-*Daniel C. Martin, Jr., A.A.S.
Electronic Servicing
*Edwin F. Martin, Jr., M.A.Ed. Architectural Drafting
Robert May, M.S. Veterans Farm Cooperative Program
Dwight D. McGowan, Diploma Automotive Mechanics
*Mildred T. McGrath, M.A. .. Electronic Data Processing: Business
Jimmy C. McLamb, A.A.S. ... Electronic Data Processing: BusinessCarolyn E. Means, M.A. . ........................... . Human Services
*Garrie W. Moore, A.A.S., R.T.-R . . . . . . . . . Radiologic Technology
Shirley H. Moore, M.Ed.L*William H. Moore, M.Ed., M.S. . . . . . . . . . . . Agricultural Programs
Kenneth D. Morey, M.S. Criminal Justice, Paralegal
Marcia Moye, M.A. Math and Science
Kathryn W. Pacha, M.A.T. English and Social Science
Helen M. Parks, M.S. Electronic Data Processing: Business
Thomas W. Parrish, Juris Doctor Criminal Justice, Paralegal
-*Constance L. Rhem, M.A. Math and Science
*Roland A. Smith, B.S. Automotive Mechanics
Sylvia Smith, B.S.N. Nursing Education
*Hugh P. Stanley, M.A., M.A.Ed Industrial Management
Carol Stevens, B.S.N., M.S. Nursing Education
Linwood Stroud, B.S. Surveying
Frank Sutton, M.B.A., C.P.A. Business Education
*Jarvis E. Tripp, Diploma Electrical Installation and Maintenance Elaine F. Umphlett, M.A. Business Education
Joseph M. Whitehurst, A.B. Electronics Engineering Lynda B. Wilms, M.A. ..... TRIO
Barbara B. Wilson, M.A.Ed. Business Education
Helena Woodard, M.A.English and Social ScienceLinwood Woodard, M.A.English and Social ScienceKatherine G. Yopp, M.S.H.E.Teacher Assistant, EarlyChildhood Associate, Educational Associate
ADJUNCT FACULTY
Robert McMillan Radiologic Technology
Nancy Phelps Surgical Technology
*Departmental Chairman.
$18$


## HISTORY OF THE COLLEGE

In March, 1961, Pitt Community College was chartered and designated by the State Board of Education as an Industrial Education Center. The College began its operation as Pitt Industrial Education Center during the same year. The programs developed and expanded, and in 1964, the school was designated a technical institute by the State Board of Education. The name was changed in July, 1964, to Pitt Technical Institute, and it opened in its new facilities in September, 1964, with nine curricula and 96 students.

In 1970, a second building was completed, providing an additional 31,458 square feet to serve the citizens of Pitt County. The White Building and the Humber Building have approximately 120,000 square feet of usable space with well designed laboratories, shops, and classrooms.

In 1975, an addition was made to the White Building, adding a new student lounge with various recreational facilities. This addition also provided facilities for the Nursing and Electronic Data Processing curricula.

The summer of 1979 brought about two important changes to Pitt Technical Institute. The Whichard Building, a 26,000 square foot classroom/shop facility, was completed on campus. Also, the North Carolina General Assembly enacted a bill that changed Pitt Technical Insti tute to Pitt Community College. The change brought about the addition of the two-year college transfer programs.

Today, Pitt Community College offers twenty-six technical programs, fourteen vocational programs, three certificate programs, and three college transfer programs.

## LOCATION

The College is located on Highway 11, South, between Greenville and Winterville.

## STATEMENT OF PURPOSE

The purpose of Pitt Community College is to provide an environment and atmosphere conducive to occupational education designed to fill the manpower need in our society and to provide for the fullest possible development of the potential of students so that they may attain effective citizenship in society.

Toward this end, Pitt Community College is committed

- To provide expanded educational opportunities for young people and adults who desire to continue their education;
- To provide relatively inexpensive, nearby educational opportunities for high school graduates, school dropouts, and adults;
- To provide vocational programs of less than technical level, preparing students for jobs requiring different levels of ability;
- To provide technical programs preparing students for jobs of this level in industry, agriculture, business, and service occupations;
- To provide college transfer programs consisting of the first two years of general college studies;
- To provide programs of technical and vocational education for employed and underemployed adults who need training or retraining or who can otherwise profit from the programs; and
- To provide short courses that will meet the general adult and community service needs of the people.


## AREAS OF STUDY AT PITT COMMUNITY COLLEGE

## ASSOCIATE IN APPLIED SCIENCE DEGREE (Two-year Programs)

Accounting
Agricultural Business Technology
Agricultural Chemicals Technology
Agricultural Science
Agricultural Science and Mechanization (Technical Specialty)
Veterans Farm Cooperative Program
Air and Water Technology
Architectural Drafting Technology
Banking and Finance**
Business Administration
Career Option Nursing Education*
Commercial Art and Graphic Design
Criminal Justice: Corrections
Criminal Justice: Law Enforcement
Early Childhood Associate
Educational Associate
Electronic Data Processing: Business
Electronics Engineering Technology
Energy Technology
General Office Technology
Human Services Technology
Industrial Maintenance Technology**
Industrial Management Technology**
Medical Secretary
Paralegal Technology

Radiologic Technology*
Secretarial Science ap
*Satisfactory admissions test results, interview, high school record, and physical examination are some of the requirements for enrollment.
**Evening programs only.

## DIPLOMA (One-year Programs)

Air Conditioning, Heating, and Refrigeration
Automotive Mechanics (Two-year Option)
Carpentry and Cabinetmaking
Cosmetology
Electrical Installation and Maintenance
Electronic Servicing (Two-year Option)
Farm Machinery Mechanics
Industrial Maintenance: Electromechanical
Machinist (Two-year Option)
Masonry
Practical Nurse Education*
Surgical Technology*
Teacher Assistant
Welding
*Satisfactory admissions test results, interview, high school record, and physical examination are some of the requirements for enroll ment.

## CERTIFICATE

Hospital Ward Clerk (Three-Month Program)
Nurse Assistant (Three-Month Program)
Surveying (Technical Specialty)

## ASSOCIATE IN ARTS DEGREE (Two-year College Transfer Programs)

Pre-Business Administration
Pre-Education (Secondary)
Pre-Liberal Arts

## SPECIAL CREDIT

Students may enroll in available courses from different curricula for possible transfer or self-improvement.


Student Life


## ADMISSIONS

Pitt Community College operates under the open-admissions policy established by the North Carolina General Assembly. All technical institutes and community colleges maintain an open-door admissions policy for all applicants who are high school graduates or high school leavers 18 years of age or older. The College has the right to selectively place these applicants.

## General Admissions

The basic requirements for curricular programs (Allied Health Admissions excepted) follow:

1. The College requires high school graduation or the high school equivalency diploma for all technical, college transfer, and certificate programs. For vocational programs, the College requires students to have at least eight units of high school work.
2. Each applicant must submit a completed Application for Admission.
3. All students take placement tests with the exception of those making satisfactory scores on the SAT and transfer students who have successfully completed appropriate units in mathematics and English.
4. Applicants for Electronics Engineering Technology and Architectural Drafting Technology should have completed one unit of algebra and one unit of geometry.
5. Each applicant should make an appointment with an admissions counselor for a personal interview prior to enrollment in the College. The counseling session is designed to acquaint the student with the College and to help the student make a wise choice in program selection.
6. All new students are expected to participate in the orientation program.

## Allied Health Curricula Admissions

Prior to admission, applicants for Nursing Education, Radiologic Technology, Surgical Technology, Hospital Ward Clerk, and Nurse Assistant must complete the following three stages.

## Stage One: Preliminary Interviewing, Transcripts, Testing

1. Have an initial interview with an admissions counselor;
2. Submit a completed preliminary application form;
3. Submit an official copy of high school transcript and official copies of all college transcripts. Transcripts should show one unit of high school chemistry with a grade of " $C$ " or better, or one year of College chemistry with grade of "C" or better. CHM 110 may be taken prior to entry in lieu of this requirement.
4. Take the admissions test on the date assigned by the admissions office; and
5. Achieve at least the minimum scores on the Comparative Guidance and Placement Test listed as follows:

| Test Section | Practical Nurse Education, Surgical Technology | Career option Nursing Education, Radiologic Technology | Hospital Ward Clerk | $\begin{aligned} & \text { Nurse } \\ & \text { Assistant } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Letter Groups | 35 | 35 | 25 | 20 |
| Reading | 39 | 39 | 20 | 20 |
| English Expressions | 30 | 30 | 20 | 20 |
| Computation | 40 | 40 | 20 | 20 |
| Arithmetic | 31 | 31 | 20 | 20 |
| Year 2000 | 26 | 36 | 17 | 17 |

EaCH Applicant will be permitted to take the CGp test ONLY ONCE A YEAR, AND ONLY TWICE IN A THREE YEAR PERIOD.

TEST SCORES AND TRANSCRIPTS WILL BE CONSIDERED TOGETHER IN DETERMINING APPLICANT'S PRELIMINARY ELIGIBILITY FOR THE ALLIED HEALTH PROGRAMS.

## Stage Two: References, Admissions Questionnaire

1. When an applicant successfully completes stage one, the admissions office will send reference forms and an admissions questionnaire which must be returned directly to Pitt Community College within ten (10) days of receipt.
2. Applicants who are already LPN's must request the North Carolina Board of Nursing submit an official copy of their LPN board scores. Applicants must also submit a copy of their current license to practice nursing in North Carolina.

## Stage Three: Final Interview, Acceptance/Rejection Procedure

1. When stage two is successfully completed, the applicants will be notified of an interview date and time. Applicants failing to report at the scheduled time for interview will have their names withdrawn from consideration unless they have previously notified the department of their inability to keep the scheduled interview.
2. If applicants complete the admissions procedure (including the interview) by the end of February, the applicant will be notified of acceptance or rejection after March 1. Applicants who complete the admissions process after March 1 will be notified as soon as possible of their acceptance or rejection.
3. Applicants who are accepted in the Nursing, Surgical and Radiologic Technology programs are required to have a physical examination and a dental checkup.
4. Hospital Ward Clerk and Nurse Assistant students are admitted quarterly depending upon needs of Pitt County Memorial Hospital. Hospital Ward Clerk and Nurse Assistant applicants who are accepted are required to have the TB and VDRL tests.
5. When classes are filled, the admissions committee will evaluate all additional completed applications and determine their eligibility. Applicants will be notified of their waiting list status, and if vacancies occur, members of the class will be selected from the waiting list.

## Transfer Admissions

Pitt Community College will accept students from other post secondary institutions provided applicants

1. Submit formal applications, and
2. Submit high school transcript and furnish transcript from each post secondary institution attended.
The dean of students may refuse admission to transfer students not in good standing at previously attended post secondary institutions.

## Readmission of Curricular Students

Students re-entering after one or more quarters out of school, with the exception of summer quarter, will follow normal admission procedures. Students out of school as a result of disciplinary action must appear before the dean of students and petition for readmission to the College.

## Provisional Admissions

A student applying too late to complete pre-entrance requirements may be admitted as a provisional student. In such cases, all requirements should be completed within the first quarter of attendance, including mailing of official transcripts (high school and post secondary) directly to the registrar's office.

## High School Admissions (Dual Enrollment)

The College admits selected high school students to appropriate courses as space permits under the following conditions:

1. The student is $\mathbf{1 6}$ years old or older;
2. Admission is approved by the Board of Trustees of the College and the appropriate local board of education upon recommendation by the College President and the applicable school unit superintendent; and
3. The student is taking at least three courses at the high school and is making appropriate progress toward graduation as determined by the school principal.

Individual student programs are jointly approved by the principal of the secondary school and the admissions office of the College.

High school students will pay regular tuition and fees and shall be treated as all other students.

## International Student Admissions

Pitt Community College has been approved by the U. S. Immigration and Naturalization Service to enroll international students from three categories: permanent residents with the Alien Registration ("green card"), refugees, or student visa holders ("F-1" Student Visa). International students present in the United States on a student visa (" $\mathrm{F}-1$ ") are considered non-residents for the purpose of tuition payments. Length of stay, payment of taxes, or ownership of property, in themselves, do not qualify international students for the status of legal residence or domicile. For further information concerning international students' admissions, contact the office of the dean of students.

## TUITION, FEES AND OTHER EXPENSES

Financial support from local, state, and federal sources allows each student an educational opportunity at minimum cost. Tuition is set by the North Carolina State Board of Community Colleges and is subject to change without notice. Textbooks, fees, and supplies are additional expenses which vary according to the program of study. The payment of all fees is required at the time of registration.

## Tuition

## Full-Time Students

All North Carolina residents enrolled for twelve (12) or more curricular credit hours are charged a maximum tuition of $\$ 39.00$ per quarter.

## Part-Time Students

The tuition charge for curricular credit students and audit students is $\$ 3.25$ times the number of credit hours for which the student is enrolled. Example: 9 credit hours $\times \$ 3.25$ equals $\$ 29.25$.

## Senior Citizens

North Carolina residents 65 years of age and older shall be exempted from the payment of curricular tuition and extension registration fees.

## Audit Students

Audit students must pay the same tuition rates as other students.

## Out-of-State Students

The entrance requirements and admission procedures for persons who reside outside North Carolina are the same as for residents. Tuition for nonresidents is $\$ 198.00$ per quarter for full-time enrollment. For part-time students, the fee is $\$ 16.50$ per credit hour.

## Residence Classification for Tuition Purposes

Under North Carolina law, a person may qualify as a resident for tuition purposes in North Carolina, thereby being eligible for a tuition rate lower than that for nonresidents. Copies of the applicable law and of implementing regulations are available for inspection in the office of the dean of students and also in the Learning Resources Center where they may be examined upon request.

## 28 FEES AND OTHER EXPENSES

## Student Activity Fee (Day Students Only)

The student activity fee for each full-time student ( 12 credit hours or more) is $\$ 6.00$ per quarter. Those students registered for nine through eleven credit hours are charged $\$ 4.00$ per quarter. Students registered for six through eight credit hours are charged $\$ 2.00$ per quarter and students registered for less than six credit hours are charged $\$ 1.00$ per quarter.

## Accident Insurance Fee

Accident insurance, covering hours in school and transportation to and from school, is available for $\$ 9.00$ per year. This insurance is strongly recommended, though not required. Students must submit claims for injury covered under the accident insurance provisions immediately, but in no instance later than 30 days, in order to expect coverage.

The premium for accident insurance is subject to change annually.

## Parking Fee

There is a $\$ 4.00$ annual charge for parking permits for day students who enroll in fall quarter. Charges for students beginning in a later quarter are prorated.

## Textbooks and Supplies

The cost of textbooks and supplies varies according to the program of study. These items may be purchased from the bookstore.

## Lab Fees for EDP Courses

Lab fees are charged for classes which require special equipment or supplies. These fees are indicated in course listings in the catalog. See course descriptions for actual fee per course.

## REFUND POLICY

The College will refund tuition if the student is, in the judgment of the dean of students, compelled to withdraw for unavoidable reasons. In such cases, two-thirds of the student's tuition may be refunded if the student withdraws within ten calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of $\$ 5.00$ or less, unless a course or curriculum fails to materialize due to no fault of the student.

Activity and insurance fees are nonrefundable.
Students desiring a tuition refund are asked to follow the steps listed below:

1. Contact the registrar's office for approval to officially withdraw from classes (see Official Withdrawal) and obtain the appropriate withdrawal form,
2. Complete the withdrawal form,
3. Contact the dean of students for approval and a written request to receive a tuition refund, and
4. Submit the completed withdrawal form and the written request for tuition refund to the cashier.
Students prepaying may receive a full refund of tuition and fees if the official withdrawal is completed by 3:00 p.m. of the day before registration of the quarter involved.

## ACADEMIC REGULATIONS

## REGISTRATION

The College year consists of four quarters. Students who are pursuing a curriculum must preregister or register at the beginning of each quarter as they progress toward their educational objectives. Returning students must make satisfactory settlement with the College office for all indebtedness and not be on academic probation before preregistering or registering. All students will register during the prescribed registration period for that quarter (refer to College calendar).

## Preregistration and Prepayment

Preregistration and prepayment are held the eighth week of each quarter at a time when students and advisors can review students' academic progress and plan courses for the coming quarter.

This opportunity is an important part of each student's program. Students and their advisors have an opportunity to discuss academic problems on an individual basis and keep abreast of progress.

Only those students currently enrolled and not on academic probation are allowed the privilege of preregistering and prepaying.

Those students failing to preregister at the designated time must complete registration on registration day.

## Late Registration (Second day of classes through drop/add)

A student may register for class(es) provided:

1. The class is not cancelled or closed;
2. The student convinces the advisor and the dean of students that it was impossible or would have involved extreme hardship to register at the appointed time; and
3. The student pays a late registration fee of $\$ 5.00$.

## Auditing Courses

Students who wish to audit courses must register for such courses. Auditors receive no credit but are expected to adhere to the same attendance policy as credit students. Participation in class discussion and examinations is at the option of the student. Fees for auditors are the same as for regular students. In the event of limited classroom space, first priority will be given to regular credit students.

The word "audit" will be written on the registration form by the student during registration clearly indicating the class(es) to be audited. AN AUDIT CANNOT BE CHANGED TO CREDIT NOR CREDIT TO AUDIT AFTER THE DEADLINE FOR ADDING COURSES.

FINANCIAL AID RECIPIENTS WILL NOT RECEIVE PAY FOR AUDITING A COURSE.

## DROPPING AND / OR ADDING COURSES

In some instances it is necessary for students to make adjustments in their schedules. To insure that the student receives proper credit, a Drop-Add Form should be completed and returned to the registrar's office. The College calendar (published in the Student Handbook and the General Catalog) indicates the last day to drop or add courses. This date is subject to change with proper notification.

## NO COURSE IS OFFICIALLY DROPPED OR ADDED UNTIL THE REQUIRED PROCEDURE IS COMPLETED.

The procedure to be followed is:

1. Obtain drop-add form from the registrar's office,
2. Have instructor(s) involved initial the form,
3. Have advisor sign the form,
4. Have registrar sign the form, and
5. Have the form validated by the cashier.

PLEASE NOTE: If a class for which a student is enrolled is cancelled by

## WITHDRAWAL FROM CLASSES

## Official Withdrawal

During the first twenty class days of a quarter, a student may withdraw from courses without penalty. (See College calendar for applicable date each quarter.) After the fourth week, official withdrawals from one or more courses or from the College are permissible when circumstances beyond control of the students prevent them from completing courses EXCEPT THAT NO OFFICIAL WITHDRAWALS WILL BE PERMITTED DURING THE LAST TEN (10) CLASS DAYS OF ANY QUARTER. Official withdrawals do not count as hours attempted. Official withdrawals after the first twenty days and prior to the last ten days of a quarter may be secured for the following reasons:

- Verification of personal illness,
- Illness or death in immediate family,
- Change in employment status, and
- Relocation to another area.

An official withdrawal may be allowed at the discretion of the dean of students for reasons other than the previous reasons, if in his judgment such a withdrawal is warranted.

Students qualifying for an official withdrawal must use the following procedures:

1. Present verification that the student qualifies for official withdrawal status to the registrar to obtain a withdrawal form,
2. Have advisor sign the form,
3. Have instructor(s) sign the form,
4. Have registrar sign the form, and
5. Have the form validated by the cashier.

Students who officially withdraw from courses before the end of the quarter will receive no grades for those courses. Only the course(s) for which they registered and the date of the official withdrawal will appear on the transcript. For more information, see the counselors or the registrar.

## Unofficial Withdrawal

An unofficial withdrawal from one or more classes is given to students who leave school or stop attending classes without qualifying for or following procedures for official withdrawal status. This includes students dropped for excessive absences (see Attendance) and not reinstated and those never attending classes after registration. Unofficial withdrawals count as hours attempted with quality points of " 0 " in determining the grade point average. Students who leave school without officially withdrawing will lower their GPA and jeopardize future readmission to the College. For more information see the counselors or the registrar.

VETERANS NOTE: Any course for which an unofficial withdrawal or an "I" (Incomplete) is received may not be retaken for pay purposes under Title 38, U.S. Code as amended by Public Law 93-508.

## CREDIT BY EXAMINATION

A student who evidences prior proficiency for a course due to previous work or educational experience may apply for credit by examination provided the student is currently enrolled in the College.

Application for approval to take the examination must be made through the academic advisor and approved by the department chairman, using the Permit for Credit by Examination form. If approved, the chairman will make arrangements for the student to take an appropriate test administered by a department instructor.

Exams will be scheduled at the discretion of the department chairman. No student may be permitted to take an exam without presenting the course instructor the properly executed Permit for Credit by Examination.

ALL EXAMINATIONS MUST BE COMPLETED DURING THE FIRST 8 WEEKS OF EACH QUARTER. A STUDENT MAY NOT TAKE AN EXAMINATION FOR ADVANCED PLACEMENT MORE THAN ONCE FOR ANY ONE COURSE. A minimum grade of "D" will be accepted.

Students applying for credit by examination must use the following procedure:

1. Contact the advisor and the department chairman to obtain the Permit for Credit by Examination,
2. Have registrar's office sign the permit,
3. Pay additional non-refundable tuition, if applicable, and
4. Present Permit to instructor who will administer the test.

The instructor administers and reports the results of the examination to the registrar's office within one week of the date of approval of the Permit by that office. Credit hours will count toward graduation; these will be computed in grade point average as grades and quality points will be recorded.

## CHALLENGE EXAMINATION

Students enrolled in a course may feel they have become proficient in course subject matter before the scheduled time for completion of the course. In that event, if they can demonstrate prior knowledge of subject matter based on work or educational experience, they may, with the instructor's approval, "challenge" the course by taking the challenge examination during the first eight weeks of the quarter.

THIS DOES NOT APPLY TO AUDIT STUDENTS (See Audit).

## TRANSFER CREDIT

Curricular students are responsible for requesting transcripts from all previously attended institutions.

Transcripts for all students enrolled in a curricular program will be evaluated automatically.

Students transferring to Pitt Community College may transfer all courses with comparable course content so long as the GPA of all courses being transferred does not fall below a 2.0.

A maximum of sixty ( 60 ) credit hours may be transferred from institutions outside the North Carolina Community College System toward completing an associate degree or diploma program. Transfer students must complete a minimum of twelve (12) quarter hours of major course work (departmental prefix designation) at Pitt Community College.

Pitt Community College awards credit for appropriate scores on various exams of the College-Level Examination Program (CLEP). The chairman of the department in which the courses will be taught determines credit to be awarded.

College transfer or technical credit for work experience cannot be allowed except through the organized and supervised cooperative education program. Academic credit is not allowed for previous work experience outside of the supervision of the College; however, a student may challenge relevant courses by examination.

Work at institutions which are not regionally accredited is evaluated on the basis of the current issue of Report of Credits Given by Educational Institutions published by the AACRAO or similar publications. Credit toward technical and vocational programs may be accepted from other agencies at the discretion of the appropriate department chairman.

## GRADE POINT AVERAGE (GPA)

The grade point average is determined by dividing the total number of quality points by the total number of credit hours of work attempted.

## DEAN'S LIST AND HONOR ROLL

All full-time technical, vocational, and college transfer students maintaining a quarterly grade point average between 3.50 and 4.00 will be recognized on the Dean's List. Those maintaining a quarterly grade point average between 3.00 and 3.49 will be recognized on the Honor Roll.

The Dean's List and Honor Roll are prepared by the registrar's office and mailed to all local or area newspapers of the students who qualify for either.

A student with an "Incomplete" grade is not eligible for the Dean's List or Honor Roll in the quarter the "Incomplete" is received.

## GRADING SYSTEM

The following grading system is used by Pitt Community College:

| Letter | Numerical <br> Equivalent | Quality Points Per <br> Quarter Hour |
| :---: | :---: | :---: |
| A | $93-100$ | 4 |
| B | $85-92$ | 3 |
| C | $77-84$ | 2 |
| D | $70-76$ | 1 |
| F | Below 70-Failing | 0 |
| W | Unofficially Withdrew | 0 |
| X | Never Attended | 0 |
| *I | Incomplete | 0 |
| *Aud | Audit | 0 |

*Not included in computing grade point average.

## INCOMPLETE

An "Incomplete" is given at the discretion of the instructor when a student demonstrates progress in a course but needs more than one quarter to complete the requirements of the course. To qualify for a grade of " $I$ ", a student must be enrolled in a course the last ten days of the quarter. No grades or quality points are awarded because of incomplete work.
The student and instructor (or if unavailable, the department chairman) must fill out a "Requirements to Remove Incomplete" form indicating what the student must do to earn a final grade. This should be signed by both instructor and student with a copy to student's advisor.

## REMOVAL OF INCOMPLETE

An " $l$ " must be removed during the next quarter immediately following receipt of the " $l$ ". The instructor has two options for requiring the student to remove the " 1 ":

1. Re-enroll in the class or
2. Complete the work during the first eight weeks.

A student may be granted an extension of time under the following provisions:

1. A student must request the extension from the instructor.
2. A student may be given an extension of up to 12 months to remove an " 1 ".

Extensions must be approved by the department chairman and submitted to the registrar's office prior to the deadline for removal.

If the student fails to take action as and when prescribed, a grade of " $F$ " will be automatically computed in the student's cumulative grade point average. After that date, no change in grade will be made because of this failure.

A student receiving an " $I$ " in a prerequisite course may not proceed to the sequential course without permission of the instructor or, if absent, the department chairman. No student can graduate with an "I" on his records if the course is required in his curriculum for graduation.

FINANCIAL AID RECIPIENTS WILL NOT RECEIVE PAY FOR REPEATING A COURSE TO REMOVE AN INCOMPLETE.

## ACADEMIC PROBATON AND SUSPENSION

The policy governing academic progress at Pitt Community College is intended to assist the student in successfully completing a chosen program of study within a given period of time. A cumulative or overall grade point average of 2.00 is required for graduation in all curricular programs.

Academic Probation: A student is on academic probation when the cumulative grade point average falls below the academic probation level according to the standards of academic progress. Students will have one quarter on academic probation to earn the required grade point average.

Academic Suspension: A student may receive academic suspension if unsatisfactory progress is shown after one quarter on academic probation. The dean of students may require the student to register as a special credit student with limited credit hours or to withdraw from the College.

Unsatisfactory Academic Progress: A student who remains on academic probation for the second consecutive quarter is considered making unsatisfactory progress during that quarter.

Satisfactory Academic Progress: A student is considered making satisfactory academic progress until placed on academic probation for the second consecutive quarter; then the student is considered making unsatisfactory academic progress as of the beginning of that quarter. Federal regulations require that a student receiving federal financial aid of any kind be making satisfactory academic progress. Special provisions may be made for students enrolled in TRIO and students receiving incompletes in developmental courses.

Good Academic Standing: A student who is not on academic probation or suspension is considered in good academic standing.

## Standards of Academic Progress Scale

The following scales establish standards of academic progress to ensure that the student will attain a cumulative grade point average of 2.00 required for graduation.

## Scale for Diploma and Certificate Programs

| Hours Toward Degree | GPA |
| :---: | :---: |
| $0-15$ | 1.00 |
| $16-30$ | 1.35 |
| $31-40$ | 1.75 |
| $41-$ | 2.00 |
|  |  |
| Scale for Associate Degree Programs |  |
| Hours Toward Degree | GPA |
| $0-15$ | 1.00 |
| $16-30$ | 1.25 |
| $31-45$ | 1.50 |
| $46-60$ | 1.75 |
| $61-75$ | 1.90 |
| $76-$ | 2.00 |

This policy does not apply to students classified as Special (those students not working toward a degree or diploma). When a student enrolls in a regular curriculum, all credit hours previously attempted will be computed in the grade point average.

## TRANSCRIPTS

Student transcripts are available under the provisions of The Family Educational Rights and Privacy Act of 1974 (P.L. 93-380). Under this Act, written consent from the student is required before the student records can be released to anyone. Additional information may be obtained from the registrar's office.

The first two transcripts are free; subsequent transcripts will cost $\$ 1.00$ each.

## TRANSFER TO OTHER INSTITUTIONS

Students planning to transfer to four-year colleges or universities are responsible for becoming acquainted with that institution's
departmental requirements in the intended major and being guided by those requirements in selecting curriculum and electives. The College maintains a file of catalogs of many other colleges and universities in the counselors' office. The counselors and the faculty advisors will assist students in selecting an appropriate institution and interpreting its requirements.

## COURSE LOAD

Full-time curricular students must take a minimum of 12 credit hours. Normally students take 15 to 18 hours. In addition to 12 credit hours, vocational students must take a minimum of 22 contact hours to be classified full-time. Students registering for more than 20 credit hours must have a cumulative grade point average of 2.0 or above or permission of the department chairman.

Students who are employed more than 15 hours per week should reduce their class load accordingly. Beginning students who have full-time employment are urged to limit class loads to 9 to 12 credit hours until they have demonstrated ability to carry a heavier schedule.

## ATTENDANCE

Regular and punctual class attendance is expected of all students in order for them to achieve their highest potential in the curriculum they have chosen and to develop desirable personal traits necessary to obtain employment after graduation. Students who anticipate absence should contact their instructors prior to the absence if possible. It is the students' responsibility to make up work missed as soon as possible if the instructors' course guidelines permit.

Instructors will drop students from class rolls (see Unofficial Withdrawal) for the following reasons:

- Students will be dropped from class rolls when their absences from the class begin to affect the quality of their class work and their class grades as determined by the class instructor.
- Any student absent five consecutive class meetings will be dropped from the class roll.
- For evening students, any student absent two consecutive class meetings must secure permission from the director of evening programs or the dean of students to continue in the class.

Students who have been dropped and have a valid reason for the absences may be reinstated at the discretion of the instructor. Should the instructor deny reinstatement, the student has recourse to appeal to the dean of students.

## CLASS SCHEDULE

Pitt Community College offers classes between the hours of 8:00 A.M. and 10:00 P.M. five days per week, except on Friday when all classes end at 6:00 P.M. The majority of the credit courses are offered between the hours of 8:00 A.M. and 6:00 P.M. When demand justifies, at least one section of each curricular course is offered during the evening hours.

Non-credit courses for personal, occupational, and community improvement are offered during both day and evening hours.
With careful planning a person can complete most of the work required for a degree or diploma in certain programs by attending evening classes.

## CHANGES IN REGULATIONS

Pitt Community College reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as deemed necessary.

## CHANGE IN MAJOR COURSE OF STUDY

Students desiring to change major course of study must receive counseling. A request for change of curriculum is initiated with a student counselor, signed by both previous and new advisors, and returned to the registrar's office. No registration schedule should be completed by an advisor until this is done.

## STUDENT CLASSIFICATIONS

Freshman ................... A student who has earned fewer | than 54 quarter hours of credit. |
| :--- |

Sophomore ................. A student who has earned 54 or more quarter hours of credit.

Full-time Technical or
College Transfer Student ... A student who is registered for twelve or more quarter hours of credit.

Part-time Student

Special Student
Full-time Vocational Student . . A student who is registered for twelve or more credit hours and at least 22 contact hours.

## GRADUATION REQUIREMENTS

Upon recommendation of the faculty and the approval of the Board of Trustees, appropriate degrees, diplomas, or certificates will be awarded to students successfully completing the requirements of the curricula in which they were enrolled.

All students must

1. Complete required and elective courses as prescribed in the catalog of record of the candidate for graduation,
2. Earn a minimum of 2.0 grade point average (" $C$ " average),
3. Clear all financial obligations to the College,
4. Complete a minimum of 12 quarter hours of major course work (departmental prefix designation) at the College (See Transfer Policy), and
5. Apply for graduation.

Students should meet with their advisors and complete their graduation checklists during preregistration for the candidates' last quarter of attendance. When the checklists have been completed and signed by both students and advisors, the advisors will present them to the registrar. After a complete check, the registrar will notify the dean of students of candidates' eligibility for graduation. Those students determined ineligible will be notified by their advisors.

Graduation exercises are held in late May and August. Presence at graduation is required except when permission for graduation in absentia has been granted by the dean of students. Requests for such permission must be made in writing 30 days prior to graduation.

Students pay for their caps and gowns. The Student Government Association provides degrees, diplomas, and certificates. A reception for graduates and their guests is held immediately following graduation exercises.

## CATALOG OF RECORD

Students in continuous attendance (summer quarter excepted) may graduate under the provisions of the catalog in effect on their dates of entry, or they have the option of choosing the requirements of a subsequently revised issue. Students not in continuous attendance must graduate under the provisions of the catalog in effect on their last reentry dates or subsequent issues.

## REPETITION OF COURSE WORK

Students may repeat any course, but each attempt will be recorded and counted in determining the students' grade point averages. No course may be counted more than once in calculating the total number of quarter hours credit toward graduation. When students receive "Fs" in courses not offered during the remainder of those students' residence, equivalent courses may be substituted for purposes of meeting program requirements upon recommendation of the appropriate department chairman and the assistant dean of instruction for curricular programs.

Veterans should be aware that they cannot receive VA benefits for repeating courses passed.

## FINANCIAL AID

Pitt Community College provides limited assistance to students who are in need of financial aid to meet their educational expenses. All inquiries concerning financial aid should be addressed to the Financial Aid Officer, Pitt Community College, Post Office Drawer 7007, Greenville, North Carolina 27834. Applications for financial aid should be submitted six weeks before the quarter begins. Applications received later will be processed on first-come, first-served basis as funds and time permit.

Students should apply for financial aid by submitting a Financial Aid Form (FAF) to the College Scholarship Service. The FAF may also be used to apply for the Pell Grant and for the North Carolina Student Incentive Grant. Students should specify 5556 as the code number for Pitt Community College in the appropriate section of the FAF.

A letter from the financial aid officer explaining the award decision and detailing information about any aid offered will be sent to each student.

To receive financial aid, a student must maintain satisfactory academic progress according to the standards of the College and not owe a refund on a grant or be in default on a loan. A student must be enrolled in an eligible program and carrying at least six credit hours.

## GRANTS

## Pell Grant (formerly Basic Educational Opportunity Grant)

The purpose of the Pell Grant, a federal aid program, is to provide financial assistance to those who need it to attend post-secondary educational institutions. Students may contact the financial aid officer concerning eligibility.

## Supplemental Educational Opportunity Grant (SEOG)

The purpose of the SEOG program is to make post-high school education available to high school graduates of exceptional financial need who, without the grants, would be unable to continue their education.

Any student in extreme financial need who has been accepted for admission or who is already enrolled and is in good standing as a full-time student may be eligible for SEOG.

The institution is responsible for selecting eligible students and handling the daily operation of the program.

## North Carolina Student Incentive Grant

Legal residents of North Carolina accepted for enrollment or enrolled full time in good standing may apply for Student Incentive Grants to help pay their educational expenses. Students must demonstrate "substantial financial need" as determined through the need analysis system of the College Scholarship Service. The amount of each grant will be based on the individual student's demonstrated financial need in relation to resources and cost of education but may not exceed $\$ 1,500$ per academic year.

Application forms may be obtained from the financial aid office or directly from College Foundation. After the student completes the application, the College financial aid officer must certify it and forward it to College Foundation. Requests are processed according to the date the properly completed application forms and need analysis reports are received. Applications received after March 15 will be processed if funds are available.

Please note that all students applying for North Carolina Incentive Grants must first apply for the Pell Grant. Both Incentive Grant and Pell Grant applications are available from financial aid offices at eligible North Carolina post-secondary educational institutions.

## LOANS

## Guaranteed Student Loan

Through the College Foundation, Incorporated, a North Carolina resident approved for admission may borrow up to $\$ 2,500$ per year as provided by the Higher Education Act of 1965, Section IV-B. The financial aid officer gives institutional approval and awards the loan through the College accounting office. Application must be made prior to July 1 of the school year.

Repayment of the Guaranteed Student Loan shall begin on the first of the tenth month after the student ceases to be a full-time student.

The repayment period may not exceed 10 years. The borrower may accelerate repayment without penalty.

Out-of-state students should contact their family banks or state higher education assistance agencies concerning state-administered guaranteed student loan programs.

## Doris Hall Phelps Memorial Loan Fund

Eligible students may borrow money to pay tuition charges only. There will be a $5 \%$ interest charge assessed on any money loaned. These loans are for short terms not to exceed two quarters. A cosigner will be required before any of these funds can be loaned.

This fund was established in memory of Mrs. Doris Hall Phelps, who for several years was a loyal and devoted employee of Pitt Community College in the Learning Resources Center.

## Educational Loan for Medical and Related Studies

Licensed practical nurses accepted for enrollment and other students who have successfully completed their first academic year of the associate degree nursing program may apply to the following address for an Educational Loan:

## N. C. Dept. of Human Resources <br> Student Loan Branch

P. O. Box 12200

Raleigh, NC 27605
(919) 733-2164

The applicant must be a North Carolina resident. The maximum amount of loan each year is $\$ 1,500$ and is secured by a promissory note endorsed by the applicant's parents or by two other sureties approvable to the N. C. Medical Care Commission. The loan recipient agrees, upon completion of the required training, to practice as a registered nurse in approved shortage areas in North Carolina a full year for each \$1,500 loan.

## Burroughs-Wellcome Loan

Pitt Community College administers a loan fund which is supported by the Burroughs-Wellcome Company. Eligible students may secure short-term loans at no interest. Money obtained through this loan fund must be used for direct educational expenses which are limited to the costs of tuition, insurance fees, supplies, and books. These loans must be repaid before the end of the current quarter. All loans must be secured by a promissory note with the signature of the borrower and the signature of one other person as surety.

## SCHOLARSHIPS

## Prepshirt Scholarships

Two scholarships of $\$ 200$ each are granted to qualified students. These scholarships are provided by Prepshirt, Incorporated, a Greenville industry.

## Finch Vocational Education Scholarship

This scholarship is furnished by Mr. and Mrs. Willard Finch in the amount of $\$ 100$ per year to cover the cost of tuition only. This scholarship is renewable for the second year if the recipeint has successfully passed the first year's work.

## Wachovia Technical Scholarship

Wachovia Bank and Trust Company has made available to students enrolled in technical programs at Pitt Community College two scholarships annually in the amount of $\$ 500.00$ each to second year technical students. The scholarships will be awarded based on need and the student's performance in the first year of a two-year technical program.

## Weyerhaeuser Foundation Vocational/Technical Scholarship

The Weyerhaeuser Company has made available to students enrolled in an industrial related field of study at Pitt Community College two scholarships annually in the amount of $\$ 900.00$ each to either technical or vocational students. The scholarships will be awarded based on academic achievement, need, performance, and participation in outside activities coupled with a proven interest toward an industrial career.

## Farm Machinery Mechanics Scholarship

The Farm Equipment Dealers of Pitt County and eastern North Carolina have made available to students enrolled in Farm Machinery Mechanics at Pitt Community College scholarships in the amount of $\$ 200.00$ each. The number of scholarship awards made annually is determined by the amount of scholarship funds available. Recipients are selected based on need, academic achievement, performance, and a proven interest toward pursuit of farm machinery mechanics as a career.

## Tar Heel Chapter - RSES Scholarship for Air Conditioning, Heating and Refrigeration Students

The Tar Heel Chapter of RSES (Refrigeration Servicing Engineering Society) has made available to students enrolled in the Air Condition-
ing, Heating and Refrigeration curriculum at Pitt Community College one scholarship annually in the amount of $\$ 200.00$ to a second quarter student in this four-quarter program. The scholarship will be awarded based on academic performance, need, and proven interest in the air conditioning, heating and refrigeration field. Recipients are expected to become members of the Tar Heel Chapter. (Membership fees will be paid by the chapter.)

## Other Institutional Scholarships

The following scholarship endowment funds are being established at Pitt Community College in memory of the individuals indicated.

George S. McRorie
Arlene Collins
C. W. Sawyer

As these funds are endowed, the available monies will be utilized to recognize achievement and assist needy students.

Various civic and community groups award scholarships periodically to Pitt Community College for particular purpose and utilization to assist students in their pursuit of a chosen field of study.

Additional information regarding the above scholarships is available in the dean of students office.

## College Work-Study, Vocational Work-Study Programs of Employment

Students, particularly those from the low-income families, who need a job to help pay for school expenses are potentially eligible for employment by Pitt Community College under federally supported work-study programs.

Students may work up to 15 hours per week while attending classes full-time.

To work under these programs, students must be enrolled and be in good standing, or be accepted for enrollment as a full-time student. The student's eligibility depends upon need for employment to defray school expenses, with preference given to applicants from low-income families. Payment for work performed is made on the basis of a time sheet certified by the signature of the person supervising the student's work.

## Comprehensive Employment Training Act (CETA)

This program is offered in cooperation with the N. C. Employment Security Commission and is available to students who qualify. Students should file an application for admission to Pitt Community

College and then visit the Employment Security Commission nearest the applicant.

## Migrant and Seasonal Farmworkers Association

For information concerning this program, write or contact Migrant and Seasonal Farmworkers Association, Inc., District I Office, P. O. Box 970, Bethel, N. C. 27812.

## Vocational Rehabilitation

Any physically handicapped student may be eligible for scholarship assistance under the provision of Public Law 565. Applications for this scholarship aid should be processed through the district vocational rehabilitation office nearest the applicant. Inquiries may be directed to any rehabilitation office.

## Local Sources of Financial Aid

Students are encouraged to keep in touch with their respective high school guidance counselors in order that they may be aware of the various kinds of scholarships granted by hometown civic clubs, church groups, or other non-profit associations or foundations.

Various fund regulations require that an individual application be completed for that specific fund. More detailed information relating to specific programs is available in the financial aid office.

## Veterans Benefits

The Veterans Benefits Laws provide financial assistance to any veteran enrolled in an approved curriculum and eligible for benefits. To be eligible, the veteran student must be enrolled in an approved curriculum and taking (for pay) only those classes required for graduation in the chosen curriculum. Veteran students must maintain satisfactory attendance, conduct, and academic progress, according to the school standards, for continuing eligibility for payment.
V. A. payments for veterans in a technical or college transfer program are based on credit hours per quarter as indicated below:

12 or more credit hours
9-11 credit hours
6-8 credit hours
Below 6 credit hours
full time
three quarter time
half time
no pay
V. A. payments for veterans in a vocational program are based on a combination of credit hours per quarter and contact (clock hours in school) hours per week as follows:

12 credit and 22 contact hours
$9-11$ credit and 16-21 contact hours
$6-8$ credit and 11-15 contact hours
Below 6 credit and 11 contact hours
full time
three quarter time half time
no pay

## Dependents of Veterans

The veterans administration offers up to 45 months of educational benefits for qualified dependents of certain disabled or deceased veterans. An allowance of up to $\$ 342.00$ per month is made to students under the program.

For further information on V.A. benefits, the student should contact the College veterans affairs office, the N. C. Division of Veterans Affairs, or the V.A. Regional Office at Winston-Salem.

## Social Security

Unmarried dependents of retired, disabled or deceased workers who register for and maintain a minimum of 12 credit hours per quarter may be eligible for continuation of social security benefits subject to the following requirements:

1. If over 18 years old, student must have been entitled to benefits for August 1981, and
2. Student must be enrolled full time in a post-secondary school before May 1, 1982.

Students not meeting these requirements will be paid through July 1982 only.

Students meeting the above requirements will not receive any further cost of living increases nor will they receive pay for the months of May, June, July and August beginning in May 1982.

Beginning August 1982 the student benefits will be reduced $25 \%$ from August 1981 entitlement. Each August thereafter, benefits will be reduced another $25 \%$ until August 1985, when the program will be discontinued.

For further information contact the College financial aid office or the Social Security Commission in Greenville.

## THE FACULTY ADVISOR SYSTEM

The faculty advisor system is designed to make a contribution to the students' educational progress. Students who have declared curriculums are assigned a faculty advisor. Students may know their advisors not only as instructors, but also as one to whom they may go and receive assistance in program planning, scheduling, and registration.

The objectives of the faculty advisors are as follows:

- To have a conference with each new advisee as soon as possible to get acquainted.
- To be alert to student problems in order to assist the student in both academic and personal matters. (Problems which the advisor feels unqualified to handle should be referred to the counselors office.)
- To assist the individual student in planning an academic schedule to meet course prerequisites and curriculum requirements.
- To maintain an academic progress file on each advisee. (This file should include grade reports, a graduation checklist, and an information sheet.)
- To post office hours, showing when available for consultation with students.
- To serve, upon request of the student, as the student's representative in conferences where decisions affecting status are made.


## STUDENT SERVICES

## Counseling Services

Counseling services are provided by trained personnel and are available to every curriculum student from pre-admission through graduation. There is no charge for these services.

Students may come to the counselors office any time a problem arises which could affect progress in school. The counselor will try to have at least one conference per year with each student. A counselor is on duty on Monday and Thursday nights until 8:30 P.M.

Tests are administered by the counselors on a group or individual basis for admission, placement, career development, and personal problem solving (interest inventories or personal interviews). Test results are available and are interpreted by the counselors at the request of faculty members or students.

## Placement Services

The placement office provides information to students and alumni about career opportunities and helps them in preparing for, and eventually acquiring positions in their fields of interest. Information about job opportunities in business, government, industry, and service occupation is available.

To receive placement assistance, students must register and complete an interview with the placement officer. This office coordinates
on-campus interviews, schedules off-campus interviews, makes employer visitations, conducts career development workshops, and maintains career opportunities information and employer information files.

## Health Services

Pitt Community College maintains no health facilities other than first aid supplies, which are located in the office of the dean of students and in the laboratories and shops. The responsibility for medical services rests with students and their parents or guardians. Emergency facilities are available at Pitt Memorial Hospital. Entering students are required to answer the health questionnaire on the application for admittance form. Student accident insurance is available at a cost of $\$ 9.00$ per year.

## Food Service

The College has a hot food service operated in the student lounge. Hot sandwiches, other short-order items, and fountain drinks are available in the student lounge. Also, vending machines for soft drinks, cigarettes, and sundries are located in each building.

## Housing

The College does not provide housing facilities for students either on or off campus. It does, however, maintain a list of housing available in the Greenville area. In addition, the services of the director of housing at East Carolina University are available on a space-available basis to students. There is no other involvement on the part of the College. Students are responsible for obtaining their own housing.

## Student Government Association

Pitt Community College has a Student Government Association. Each curriculum has one representative and one alternate in the Association. Officers are elected from this body annually. Activities supported by the SGA include the Pitt Community College athletic teams, field days, dances, cookouts, community projects, and intramural sports.

## Identification Cards

All day students must secure an ID card from the counselors office during the second or third week of each quarter. This card will admit students to social, cultural, and educational events that are sponsored by the College.

## Gamma Beta Phi

Gamma Beta Phi is an honor society chartered in 1975. Membership is based upon a GPA of 3.0. Gamma Beta Phi comes under the supervision of the SGA.

## Student Publications

Pitt Community College publishes the following:

- College Catalog
- Student Handbook
- Program Brochures
- New Student Information Sheet
- Co-Op Newsletter
- PCC Newsclips


## Guided Tours

Many groups visit Pitt Community College during the year for the purpose of inspecting the facilities and opportunities available in vocational, technical, and college transfer education.

Groups are assembled in the lobby where they are greeted by the dean of students. Larger groups are divided into smaller groups and taken on a guided tour of the College. All programs are explained to the groups as the tour progresses. In addition to seeing classes and shops, the groups are also taken to the Learning Resources Center and the Learning Center.

## Class Rings

All orders for class rings will be made with the dean of students. Notices will be posted relevant to dates for measurements. Students are urged to be prompt when making these orders.

## TRAFFIC REGULATIONS

All automobiles operated on the campus by day students and College personnel must be registered with the chief of security. Parking permits are issued for each registered vehicle and must be displayed on the rear bumper, left side. The operators of automobiles on the campus are subject to specific parking and traffic regulations. The College reserves the right to withdraw the privilege of operating an automobile on the campus for failure to abide by the regulations.

## 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.

## FIRE DRILLS

Fire drills will be held once a quarter. The fire alarm consists of a pulsating, repeated sounding of a bull horn. Personnel will exit at the outside door closest to where they are at the time the alarm is sounded and proceed in an orderly manner to a safe distance from the building. The all clear signal is a long sounding of the bell system.

## STUDENT RIGHTS AND RESPONSIBILITIES

Students are responsible for the 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 that of the student.

Students are required to have knowledge of and observe all regulations pertaining to campus life and student behavior. They are responsible for maintaining communications with Pitt Community College by keeping on file with the registrar's office at all times their current address and telephone number.

Copies of the Rights and Freedoms of Students can be obtained from the office of the dean of students.

## DISCIPLINARY ACTION

## Student Conduct

It is expected that at all times the student will conduct himself as a responsible adult. 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 possession and/or 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 Pitt 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 $N$. C. law may be turned over to the local authorities.

## Due Process

Students who question the fairness of disciplinary action taken against them are entitled to due process by submitting a written notice of appeal. The appeal is heard by the Hearing Committee (Judicial Review Board), which is composed of the President and the VicePresident of the Student Government Association and two faculty members appointed by the President of the College. The decision of
the committee is final, subject only to the student's right of appeal to the President of the College or ultimately to the Board of Trustees. Additional information may be obtained from the dean of students.

## Dismissal

A student may be dismissed from a class or from the College for conduct or personal habits which are not in the best interest of the student and of the College.

Information on dismissal and reinstatement procedure may be obtained from the office of the dean of students.

The provisions of due process will be applicable to all actions involving suspensions, extensions, probation, and dismissal.

## LEARNING RESOURCES CENTER

The Learning Resources Center (LRC) at Pitt Community College includes Library Services, Audiovisual Services, and Media Production Services. The primary purpose of the LRC is to provide learning resources and services to support and enrich the educational programs of the College. These resources and services are available to students, faculty, and staff of Pitt Community College and to the adult citizens of Pitt County.

LRC resources and services include a wide variety of print and nonprint materials, technical equipment, supportive facilities, and specialized services. The print materials collection includes books, magazines, newspapers, pamphlets, government publications, and other printed materials. Audiovisual materials in the LRC collection include films, filmstrips, filmloops, transparencies, slides, audio and video tapes, and records. Microfilm copies of back issues of selected magazines and newspapers and certain historical records of the Pitt County area are also available for use in the LRC. Equipment needed for the utilization and duplication of certain instructional materials is provided by the LRC.

A staff of professional librarians, media specialists, technicians, and assistants provide instruction and assistance in the use of LRC materials, equipment, and services at all hours the LRC is open.

The LRC is open Monday through Thursday from 7:45 A.M. to 9:30 P.M. and on Friday from 7:45 A.M. to 5:00 P.M. (closed Saturdays, Sundays, and holidays). Located on the third floor of the Humber Building (easily reached by elevator), the LRC is arranged and furnished to provide a pleasant atmosphere conducive to study and to leisure-time use of the variety of resources and services available.

## COOPERATIVE EDUCATION

## Cooperative Education Program

The Cooperative Education Program is designed to give students the opportunity to integrate their classroom study with practical experience in the major field. This is done by working and attending school in optional plans.

## Eligibility

All students who are taking six (6) quarter hours or more who have completed one quarter or who are already employed in work-related jobs are eligible to enter the Cooperative Education Program provided they meet the following requirements:

1. Students must have a 2.0 GPA , and/or approval of the department chairman and cooperative education director.
2. Students must plan to graduate from Pitt Community College.

## When to Apply

Students may apply as soon as they have been accepted for enrollment by the school even though they will not receive a work assign ment until after they have completed one quarter of school.

## Application Procedure

Students who are interested in the Cooperative Education Program should follow the procedure outlined below:

1. The student will obtain an application form from the cooperative education office and make an appointment with the co-op office to review the completed application.
2. The director or the coordinator will conduct an interview with the student with regard to his career goals and possible cooperative assignments.
3. If the student is accepted, the cooperative education office with the assistance of the department chairman or advisor will be responsible for locating an appropriate training position.

## Academic Credit

A. One (1) credit hour will be given for the satisfactory completion of each quarter's cooperative training assignment of each ten hours per week. The cooperative education director will grade assignments based on reports submitted by the student, the employer, and the faculty advisor. Reports of credit will be made to the registrar's office by the cooperative education director.
B. Generally, a student may receive a maximum of four credit hours during any one quarter and a maximum of nine credit hours toward degree or diploma requirements. Those enrolled in the associate in arts degree program can earn up to six credit hours.
C. Credits earned may be used as add-on, elective, or substitute. This is to be determined by the advisor and the department chairman.

## CONTINUING EDUCATION

The Continuing Education Division at Pitt Community College is committed to serve adults from the general community, business, and industry. Various programs are offered for the individual to meet particular needs and interests. Opportunities exist to upgrade occupational skills, to acquire new skills, to complete high school, and to pursue activities for personal enrichment.

Classes are held on campus and in off-campus facilities such as public schools, community buildings, churches, civic centers, industrial plants, and fire stations.

Each course is open to adults 18 years of age or older and not enrolled in a secondary school. However, high school students 16 years or older are permitted to enroll with approval from the appropriate public school official.

## Schedule of Courses

A schedule of Continuing Education classes is published quarterly and distributed throughout Greenville and surrounding areas. Classes are organized upon demonstration of sufficient interest and availability of the required facilities and instructors. Newspaper, radio, and television are utilized to announce course offerings. Classes are usually held from 7:00 P.M. to 10:00 P.M.; however, classes can be scheduled for mornings or afternoons.

## Course Credit

Generally courses offered in Continuing Education are non-credit; however, credit will be given in the Adult High School Diploma Program. CEU's (Continuing Education Units) are also awarded for certain courses and seminars. (Ten contact hours of class earn a CEU.) Written acknowledgement of course completion or participation may be provided to individuals upon request.

## Registration and Attendance

Registration for classes is normally completed on a first-come, firstserved basis. A minimum of 14 persons is usually needed to begin
classes. If regular attendance falls below six people, the class may be discontinued.

## Fees

A registration fee of $\$ 8.00$ or $\$ 15.00$ is required for all non-credit courses (except Adult Driver Training for which there is an additional fee) and must be paid at the first class meeting. There is no charge for registration to senior citizens 65 years of age or older. Accident insurance is available to all students. Students in laboratory courses requiring the use of equipment and machinery must either purchase insurance or sign a waiver form.

## Veterans Benefits

Information regarding veterans benefits may be found in the appropriate section of this publication. For additional information, contact the veterans affairs officer: telephone 756-3130, extension 260. After 5:00 P.M., visit Room 113 in the Humber Building or telephone 756-3130, extension 238.

## Course Descriptions

Course descriptions are available upon request by calling or visiting the Division of Continuing Education. Individuals who desire counseling or other special assistance may contact either the instructor or the directors in the Continuing Education Division.

## Books and Supplies

Most courses do not require textbooks. When a text is required, students will be notified at the first class meeting. Students are generally responsible for their class supplies.

## General Adult Education

The General Adult Education Program consists of non-credit courses which enable the adult to develop a skill or an art in an area of interest.

## Adult Basic Education

Adult Basic Education is designed to improve the reading and math skills of persons who seek self improvement through organized classes. The goal of the program is to help the student function more effectively in the environment. Classes may be established throughout the Pitt County area and may be co-sponsored with churches, schools, or community organizations. Groups interested in developing a class (at least 10 people), may contact the adult basic education coordinator at Pitt Community College. There are no charges for the classes or materials.

## Adult High School Equivalency

The Adult High School Equivalency program is designed to prepare the adult to take the state high school equivalency test, the General Educational Development Test (GED). Adults may enroll in morning, afternoon, or evening classes at specified locations in the Greenville and Pitt County area. Program content covers English expression, literature, mathematics, social studies, and natural science. There is a $\$ 5.00$ tuition fee, and students may be required to purchase instructional materials.

The GED test program, through which adults may earn a high school equivalency diploma, is administered in the Learning Center by appointment. The state of North Carolina requires a $\$ 5.00$ fee to take the GED. Telephone 756-3130, extension 231, or come by the Learning Center in Room 2 of the White Building.

## General Interest Offerings

The following are examples of general interest courses:

Art: Painting, Drawing,
and Sketching
Arts and Crafts
Auto Care and Tune-up
Baking and Decorations
Calligraphy
Conversational French, German, Spanish
Creative Writing
Crewel Embroidery
Crochet
Investments and Securities
Knitting
Macrame

Needlepoint
Prenatal Education (Lamaze
Method of prepared childbirth)
Pottery
Rug Hooking
Seasonal Decorations
Sewing
Sign Language
Spinning and Natural Dyes
Weaving

## The Learning Center

The Learning Center at Pitt Community College is designed to provide opportunities for individual study for both curricular students and adults in the community. Study areas include the following: preparation for taking the high school equivalency test, preparation for entrance into a curricular program, preparation for college entrance, upgrading in specific areas, and study of subjects for personal satisfaction.

Pitt Community College is approved by the North Carolina Department of Public Instruction and the American Council on Education as a testing center for the General Education Development Test Battery
(GED). This testing program, through which adults may earn a high school equivalency diploma, is administered in the Learning Center by appointment. The state of North Carolina requires a $\$ 5.00$ fee to take the GED. Telephone 756-3130, extension 231, or come by the Learning Center in Room 2 of the White Building.

## Hours of Operation:

> 8:00 AM - 5:00 PM, Monday - Thursday
> 6:00 PM - 10:00 PM, Monday - Thursday
> 8:00 AM - 5:00 PM, Friday

A coordinator is available at all times to evaluate, advise, and aid students in their progress.

Anyone 18 years of age or older who is not enrolled in a secondary school may enroll in the Learning Center.

High school students 16 years or older are permitted to enroll with approval from the appropriate public school official.

## Occupational Extension

Occupational courses are offered for employed persons needing to upgrade their skills or for persons seeking employment at the skilled technical and vocational level.

## General Occupational Courses

The following are examples of general occupational courses:
Arc Welding Ornamental Horticulture

Automotive Repair
Aviation Ground School
Basic Blueprint Reading
Basic Electricity
Basic First Aid
Brick Masonry
Estimating for the Building Trades
Fundamentals of Real Estate
Handyman Bricklaying
Home Plumbing Repair
Household Appliance Repair

## Specialty Occupational Programs

## Fire Service Training

Fire Service Training is designed to provide firemen the opportunity to gain technical information and skill in modern fire fighting through
a variety of learning experiences. Usually these courses are conducted in the local fire departments for the volunteer firemen, who train as an organized group utilizing equipment and methods they would ordinarily use in preventing and suppressing fire.

Some of the subject areas for volunteer firemen are as follows: arson detection, compressed gas emergencies, fire apparatus practices, hazardous materials, introduction to fire fighting, ladder practices, hose practices, rescue practices, protective breathing equipment, and fire fighting procedures.

Courses such as Home Safety, Fire Prevention and Industrial Fire Brigade Training are available to the public and industry as well as fire service personnel.

## Hospitality Training

This program is provided to train hotel-motel managers, food service personnel, waiters, waitresses, cooks, and maids or any other individual or group in the hospitality field.

Hospitality education has three objectives: (1) to develop, within individuals, skills that will qualify them for better employment opportunities in the hospitality field; (2) to provide employers with welltrained personnel to operate their businesses; and (3) to provide better hospitality. Some of the courses are as follows: Front Office Procedures, Human Relations, Communication, Basic Nutrition and Menu Planning, Overview of School Food Service, Use and Care of Equipment, Quantity Cooking, and Quantity Food Preparation.

## Law Enforcement Training

Several short courses and seminars are conducted to upgrade and train law enforcement officers. Some courses are as follows: Introduction to Police Science, Courts and Law, Laws of Arrest, Search and Seizure, and General Criminal Investigation.

The College also offers two-year associate degrees in criminal justice.

## Management Development Training

Management Development Training Courses are designed for potential and active supervisors who want to prepare for more effective leadership and advancement. Courses are offered both on and off campus. The courses are flexible in terms of content and meeting times. Every effort is made to fit course content to particular individual, industrial, or business needs.

Some of the courses are:

Principles of Supervision
Economics and Management
Economics in Business
and Industry
Creative Thinking Supervisory Techniques

Employee Evaluation
and Interviewing
Conference Leadership
Training
Effective Writing
Motivation Techniques
Effective Communication

## Professional In-Service Programs

Teacher Certificate Renewal: Local superintendents responsible for providing in-service upgrading and training for teachers coordinate with the division of continuing education to develop special courses deisgned to meet the needs of the local school unit. The division assists in the development and presentation of approved courses by providing needed personnel, facilities and services in coordination with the local school unit.

Other Professional In-Service: Various institutions and agencies require employee upgrading through the offering of in-service classes. The division of continuing education coordinates with each agency to develop the in-service program most appropriate to their needs.

## Special Industrial Training

Classes may be in the immediate area in which the industry is located.

In addition, special classes may be developed for training of personnel for a new industry locating in the area or an expanding industry.

Courses are designed to meet specific group needs. New programs and classes are scheduled at the time and place convenient to the interested group or individuals.

For information and assistance in developing occupational extension classes, call the assistant dean for continuing education.

## Workshops, Seminars, and Conferences

Workshops, seminars, and conferences are planned and offered by Pitt Community College on a variety of topics in cooperation with civic groups, non-profit organizations, or by special request from the citizens of Pitt County.

The workshops and seminars may carry CEU credit if arrangements have been made in advance with Pitt Community College, and if participants meet necessary requirements for receiving credit.

## The Visiting Artist Program

The Visiting Artist Program is a cooperative effort between the North Carolina Arts Council and the Department of Community Colleges. Pitt Community College is one of the many institutions throughout the state which employs full-time artists representing a variety of different art forms.

The purpose of the program is to enhance the appreciation and cultivation of the arts within the College and the surrounding areas. This unique program presents to students, faculty, and the community at large an opportunity to experience first hand the work of creative and performing artists.

During the residency, the artist presents performances, lectures, demonstrations, and workshops as well as providing assistance to organizations such as civic clubs, public schools, arts councils and church groups. The artist also organizes exchange programs with artists from other schools in the Visiting Artist Program in order to bring a variety of artistic experience to the College and community.



## College Transfer



## REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE

The Associate in Arts degree is awarded upon completion of at least 96 quarter hours of credit with an overall grade point average of 2.0 (C) or better, to include:
Credit Hours
COMMUNICATIONS ..... 11
Grammer and Composition, Lib 150
HUMANITIES AND FINE ARTS ..... 15
Literature, philosophy, religion, foreign language, art, drama, speech, and music
MATHEMATICS ..... 5
SCIENCE ..... 12Courses, at least one of which is to include laboratory experience,will be chosen from areas such as astronomy, biology, chemistry,geology, and physics
SOCIAL SCIENCE ..... 20
History, anthropology, economics, geography, sociology, political science, and psychology
HEALTH AND PHYSICAL EDUCATION ..... 5
*ELECTIVES ..... 28
TOTAL CREDIT HOURS FOR DEGREE ..... 96

* Electives should be selected on the basis of the student's major field of study and on the requirements of the institution to which the student intends to transfer.


## PRE-BUSINESS ADMINISTRATION

Pre-Business Administration is designed for those students who wish to transfer to a senior college or university to pursue majors in the areas of Accounting, Banking, Business Administration, Economics, Finance, Management, Marketing, Quantitative Methods, or Real Estate. Degree plans may vary according to requirements of the senior institution.

## PRE-BUSINESS ADMINISTRATION SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER |  | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG | 150 | Composition I | 3 | 0 | 3 |
| HEA | 150 | Personal and Community Health | 3 | 0 | 3 |
| PSY | 150 | General Psychology I | 3 | 0 | 3 |
| BUS | 165 | Introduction to Business | 5 | 0 | $\underline{5}$ |
|  |  |  | 14 | 0 | 14 |
| SECOND QUARTER |  |  |  |  |  |
| ENG | 151 | Composition II | 3 | 0 | 3 |
| *MAT | 150 | College Algebra | 5 | 0 | 5 |
| LIB | 150 | Library Research Skills | 2 | 0 | 2 |
| SOC | 150 | Sociology 1 | 5 | 0 | 5 |
| PSY | 151 | General Psychology II | 3 | 0 | 3 |
|  |  |  | 18 | 0 | 18 |
| THIRD QUARTER |  |  |  |  |  |
| ENG | 152 | Composition III | 3 | 0 |  |
| ART | 160 | Art Appreciation | 3 | 0 | 3 |
| EDP | 150 | Introduction to Computers | 5 | 0 | 5 |
| SPH | 150 | Voice and Diction |  |  |  |
| SPH | 160 |  | 3 | 0 | 3 |
|  | 160 | Physical Education | 0 | $\underline{2}$ | 1 |
|  |  |  | 14 | 2 | 15 |
| FOURTH QUARTER |  |  |  |  |  |
| ENG | 250 | British Literature I |  |  |  |
| ENG | 260 | American Literature I | 3 | 0 |  |
| $\begin{gathered} \text { BIO } \\ \text { or } \end{gathered}$ | 250 | General Biology 1 |  |  |  |
| PHY | 260 | Physics and the Environment I | 3 | 2 | 4 |
| ECO | 150 | Economics ! | 3 | 0 | 3 |
| ACT | 150 | Principles of Accounting | 3 | 2 |  |
|  |  | Physical Education | $\underline{12}$ | $\frac{2}{6}$ | $\frac{1}{15}$ |


*If students,as a result of placement tests or grades, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

MAT 099, 100R, 100, 101, ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101; ORI 150.

The pre-business student may select additional elective credits from approved college transfer courses and make course substitutions from such college transfer courses on a credit-for-credit basis upon approval by the student's department chairperson.

## PRE-EDUCATION (SECONDARY)

Pre-Education (Secondary) is designed for students who plan to transfer to senior institutions and major in secondary education and then teach in high school. Students take the same courses as preliberal arts students, with elective hours chosen in the area of major interest.

## PRE-EDUCATION (SECONDARY) SUGGESTED CURRICULUM BY QUARTERS

| FIRST QU | UARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG | 150 | Composition I | 3 | 0 | 3 |
| HEA | 150 | Personal and Community Health | 3 | 0 | 3 |
| HIS | 150 | American History 1 |  |  |  |
| HIS | 160 | World History to 1500 | 5 | 0 | 5 |
| PSY | 150 | General Psychology I | 3 | 0 | 3 |
|  |  |  | 14 | 0 | 14 |


| SECOND QUARTER |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG | 151 | Composition II | 3 | 0 | 3 |
| $\begin{aligned} & \text { HIS } \\ & \text { or } \end{aligned}$ | 151 | American History II |  |  |  |
| HIS | 161 | History of Europe Since 1500 | 5 | 0 | 5 |
| PSY | 151 | General Psychology II | 3 | 0 | 3 |
| *MAT | 150 | College Algebra | 5 | 0 | 5 |
| LIB | 150 | Library Research Skills | $\underline{2}$ | 0 | 2 |
|  |  |  | 18 | 0 | 18 |


| THIRD QUARTER |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG | 152 | Composition III |  |  |  |
| SPH | 150 | Voice and Diction |  | 0 | 3 |
| or |  |  |  |  |  |
| SPH | 160 | Public Speaking | 3 | 0 | 3 |
| ART | 160 | Art Appreciation | 3 | 0 | 3 |
|  |  | $* *$ Social Science Elective | 5 | 0 | 5 |
|  |  | Physical Education | $\underline{0}$ | $\underline{2}$ | $\frac{1}{14}$ |
|  |  |  | 2 | 15 |  |

## FOURTH QUARTER

ENG 250 British Literature I
or
ENG 260 American Literature I
BIO 250 General Biology I
or 260 Physics and the Environment I
Physical Education
**Electives
FIFTH QUARTER COURSE TITLE
C 1 ..... $3 \quad 2 \quad 4$ ..... $10 \quad \underline{0} \quad 10$ ..... 16 ..... 16 ..... 17 ..... 17ENG 251British Literature II
orENG 261 American Literature IIBIO 251 General Biology II
or
PHY 261 Physics and the Environment II**Electives**Electives
SIXTH QUARTERBIO 252 General Biology III
orPHY 262 Solar Influences and Applications$\begin{array}{lll}3 & 2 & 4\end{array}$
Humanities or Fine Arts Elective ..... 30 ..... 3
**Electives

| $\frac{9}{15}$ | $\frac{0}{2}$ | $\frac{9}{16}$ |
| :--- | :--- | :--- |

TOTAL QUARTER HOURS ..... 96*If students, as a result of placement tests or grades, are found to be deficient in mathand English skills, they will be required to take the appropriate courses from thefollowing list:
MAT 099, 100R, 100, 101; ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101, 101A; ORI 150.

[^0]
## PRE-LIBERAL ARTS

The Pre-Liberal Arts curriculum is designed for students who intend to transfer to a senior college for their four-year degrees and for people who wish a liberal arts education ending in a two-year degree. Students take general college courses, including courses in English, math, biology, speech, health, physical education, and social science such as psychology, sociology, and history. Because the program is general, many students who have not decided on a major select pre-liberal arts. Adjustments can be made to meet the general education requirements of most colleges and universities.

## PRE-LIBERAL ARTS SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER |  | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG | 150 | Composition 1 | 3 | 0 | 3 |
| HEA | 150 | Personal and Community Health | 3 | 0 | 3 |
| HIS or | 150 | American History 1 |  |  |  |
| HIS | 160 | World History to 1500 | 5 | 0 | 5 |
| PSY | 150 | General Psychology I | 3 | 0 | 3 |
|  |  |  | 14 | 0 | 14 |
| SECOND QUARTER |  |  |  |  |  |
| ENG | 151 | Composition II | 3 | 0 | 3 |
| HIS or | 151 | American History II |  |  |  |
| HIS | 161 | History of Europe Since 1500 | 5 | 0 | 5 |
| PSY | 151 | General Psychology II | 3 | 0 | 3 |
| *MAT | 150 | College Algebra | 5 | 0 | 5 |
| LIB | 150 | Library Research Skills | 2 | 0 | 2 |
|  |  |  | 18 | 0 | 18 |
| THIRD QUARTER |  |  |  |  |  |
| ENG | 152 | Composition III | 3 | 0 | 3 |
| SPH | 150 | Voice and Diction |  |  |  |
| SPH | 160 | Public Speaking | 3 | 0 | 3 |
| ART | 160 | Art Appreciation | 3 | 0 | 3 |
|  |  | **Social Science Elective | 5 | 0 | 5 |
|  |  | Physical Education | 0 | $\underline{2}$ | 1 |
|  |  |  | 14 | 2 | 15 |
| FOURTH QUARTER |  |  |  |  |  |
| ENG | 250 | British Literature I |  |  |  |
| ENG | 260 | American Literature I | 3 | 0 | 3 |
| BIO | 250 | General Biology 1 |  |  |  |
| PHY |  |  | 3 | 2 | 4 |
|  | 260 | Physics and the Environment I | 3 | 2 | 1 |
|  |  | Physical Education | 8 | 0 | 8 |
|  |  | **Electives | 14 | 4 | 16 |

FIFTH QUARTER COURSE TITLE C $\quad \mathrm{CH}$ENG 251 British Literature II
or
ENG 261 American Literature II $\begin{array}{lll}3 & 0 & 3\end{array}$
BIO 251 General Biology II
or
PHY 261 Physics and the Environment II
4
**Electives
$\begin{array}{lll}10 & \frac{0}{2} & \frac{10}{17}\end{array}$
SIXTH QUARTER
BIO 252 General Biology III
or
PHY
262
Solar Influences and Applications
$3 \quad 2 \quad 4$
**Humanities or Fine Arts Elective
303
**Electives
$\frac{9}{15} \quad \frac{0}{2} \quad \frac{9}{16}$
TOTAL QUARTER HOURS ..... 96
*If students, as a result of placement tests or grades, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:
MAT 099, 100R, 100, 101; ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101, 101-A; ORI 150.

## **RECOMMENDED ELECTIVES:

Fine Arts: ART 170; MUS 150
Humanities: PHI 150; REL 150, 160, 161
Social Science: ANT 150, 160; ECO 150, 151, 152; GEO 150; POL 150; PSY 160, 170; SOC 150, 160, 170

## General Electives

ACT 150, 151, 152; BUS 165, 166, 167; EDP 150; EDU 250; ENG 270, 271, 272, 273, 274, 275; MAT 180; PED.


Technical
Education

## ACCOUNTING

Opportunities in accounting are increasing. With the increasing population, the industrial development, and the growth in large and small business in North Carolina, the need for competent accountants is rapidly increasing.

The accounting curriculum is designed to help students take advantage of these employment opportunities. Students are given training in the accounting theories and skills necessary for entry into the accounting profession.

The accounting curriculum aims to develop the following competencies:

1. Understanding of the principles of organization and management in business operations;
2. Ability to practice accounting, including tax and cost accounting;
3. Knowledge in specific elements of business law, finance, economics, and data processing;
4. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy; and
5. Understanding and skill in effective communication for business.
Graduates in accounting may qualify for any of the following positions: accounting clerk, payroll clerk, ledger accountant, junior auditor, and junior cost accountant. This training plus further work experience should prepare students to become office manager, accounting supervisors, and to fill other responsible positions in a business firm. Job opportunities are also available in federal, state, and local government offices.

## ACCOUNTING SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| ACT 150 | Principles of Accounting | 3 | 2 | 4 |
| BUS 165 | Introduction to Business | 5 | 0 | 5 |
| ECO 150 | Economics 1 | 3 | 0 | 3 |
| *ENG 101 | Grammar | 3 | 0 | 3 |
| *MAT 110 | Business Mathematics | 5 | 0 | 5 |
|  |  | 19 | 2 | 20 |
| SECOND QUART |  |  |  |  |
| ACT 151 | Principles of Accounting | 3 | 2 | 4 |
| BUS 102 | Beginning Typewriting | 2 | 3 | 3 |
| BUS 166 | Business Law I | 3 | 0 | 3 |
| ECO 151 | Economics II | 3 | 0 | 3 |
| ENG 102 | Composition | 3 | 0 | 3 |
|  |  | 14 | 5 | 16 |


| THIRD QUARTER |  | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACT | 152 | Principles of Accounting | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 167 | Business Law II | 3 | 0 | 3 |
| EDP | 115 | FORTRAN | 2 | 4 | 4 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
|  |  |  | 13 | 8 | 17 |
| FOURTH QUARTER |  |  |  |  |  |
| BUS | 222 | Intermediate Accounting | 5 | 0 | 5 |
| BUS | 235 | Business Management | 3 | 0 | 3 |
| EDP | 223 | Introduction to RPG II | 2 | 4 | 4 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| BUS | 226 | Payroll Accounting | 3 | 2 | 4 |
|  |  |  | 16 | 6 | 19 |
| FIFTH QUARTER |  |  |  |  |  |
| BUS | 123 | Business Finance | 3 | 0 | 3 |
| BUS | 223 | Intermediate Accounting | 5 | 0 | 5 |
| BUS | 225 | Cost Accounting | 3 | 2 | 4 |
| BUS | 268 | Auditing Theory | 3 | 0 | 3 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
|  |  |  | 17 | 2 | 18 |
| SIXTH QUARTER |  |  |  |  |  |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| BUS | 224 | Intermediate Accounting | 5 | 0 | 5 |
| BUS | 269 | Auditing | 3 | 0 | 3 |
|  |  | Elective | 3 | 0 | 3 |
|  |  |  | 14 | 2 | 15 |
| TOTAL | UARTER | HOURS |  |  | 105 |

## AGRICULTURAL BUSINESS TECHNOLOGY

Many responsible positions in agricultural businesses and industries require technical training not available in high school or in four year colleges. The Agricultural Business Curriculum is designed to help students acquire knowledge, understanding, and abilities in the broad field of agriculture with business training to prepare the graduate for many of the varied employment opportunities in agriculture.

Successful completion of this curriculum should enable persons to assume responsibilities in an agricultural firm and should enable them to advance within such a business. Upon graduation from this curriculum, an individual should qualify for various jobs in agricultural business and industry, such as salesperson or store manager in farm supply stores; agricultural field serviceperson; salesperson, demonstrator, or plant manager of feed and food companies; farm products inspector; or salesperson or office managers of farm products marketing firms.

## AGRICULTURAL BUSINESS TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG 101 | Grammar | 3 | 0 | 3 |  |
| *MAT | 100 | Review of Fundamental Mathematics | 5 | 0 | 5 |
| AGR 125 | Animal Science | 5 | 2 | 6 |  |
|  |  | **Agricultural Elective | $\underline{3}$ | $\underline{2}$ | $\frac{4}{4}$ |

## 72 SECOND QUARTER

| ENG | 102 | Composition | 3 | 0 | 3 |
| :--- | :--- | :--- | ---: | ---: | ---: |
| AGR | 185 | Soil Science and Fertilizers | 5 | 2 | 6 |
| ACT | 150 | Principles of Accounting | 3 | 2 | 4 |
|  |  | **Business Elective | $\frac{3}{14}$ | $\frac{0}{4}$ | $\frac{3}{16}$ |

THIRD QUARTER

| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |
| AGR | 170 | Plant Science | 5 | 2 | 6 |
| BUS | 102 | Beginning Typewriting |  |  |  |
| or |  | $\frac{2}{13}$ | $\frac{3}{5}$ | $\frac{3}{15}$ |  |

FOURTH QUARTER

| ENG | 103 | Report Writing | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGR | 278 | Weed Identification and Control | 3 | 2 | 4 |
| BUS | 232 | Sales Development | 3 | 0 | 3 |
| AGR | 228 | Plant and Animal Diseases | 3 | 2 | 4 |
| CHM 101 | Chemistry | $\frac{4}{16}$ | $\frac{2}{6}$ | $\frac{5}{19}$ |  |


| FIFTH QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| AGR 119 | Techniques of Welding | 2 | 3 | 3 |
| AGR 204 | Agricultural Economics and Farm Records | 3 | 2 | 4 |
| AGR 225 | Agricultural Pollution Control | 3 | 2 | 4 |
| ***AGR 205 | Agricultural Marketing | 3 | 2 | 4 |
|  | **Social Science Elective | 3 | 0 | 3 |
|  |  | 14 | 9 | 18 |
| SIXTH QUARTER |  |  |  |  |
| AGR 203 | Pesticide and Fertilizer Application | 3 | 2 | 4 |
| ***AGR 247 | Pesticides and Their Use in Home and Community | 3 | 2 | 4 |
| BUS 110 | Office Machines | 2 | 2 | 3 |
| AGR 245 | Crop Insects | 3 | 2 | 4 |
|  | **Social Science Elective | 3 | 0 | 3 |
|  |  | 14 | 8 | 18 |

TOTAL QUARTER HOURS ..... 104
*If students, as a result of placement tests or grades, are found to be deficient in math andEnglish skills, they will be required to take the appropriate courses from the following list:
ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 009, 100 R.
**The agricultural business technology student may select elective credits from the list of recommended electives or from other related courses and make substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

Agricultural: AGR 155, 218, 272, 273, 279, 290
English: ENG 105
Environmental: ENV 101, 103, 104
Social Science: AGR 296; ECO 108; PSY 101, 102, 206; SOC 101, 102, 103;
SSC 101; COE 100
Business: BUS 100, 103, 166, 167, 123, 154, 229, 235, 239; ACT 151
***AGR 218 may be substituted for AGR 205.
***AGR 273 may be substituted for AGR 247.

## AGRICULTURAL CHEMICALS TECHNOLOGY

Pitt Community College was selected by the North Carolina State Board of Education to offer this curriculum and it has been equipped with facilities consistent with needs reflected through an active industrial advisory committee. This curriculum is the only one of its kind in the state and one of 15 in the nation. It is widely supported and advised by related industries statewide. The program will prepare a graduate with a sound, well-rounded background that offers to industry a semiprofessional employee who, with normal on-the-job orientation, can actively execute the many technical tasks demanded by this field of endeavor. Specific objectives of this curriculum are to develop the following student competencies:

1. Understanding the basic agricultural sciences such as crop production and pest control in their application to farming;
2. Understanding applied chemistry within the agricultural chemicals industry;
3. Understanding business organizations, procedures, and management of firms producing, marketing, and applying agricultural chemicals; and
4. Understanding the formulation and use of farm chemicals and their relation to profitable agricultural production, including safety procedures.

A broad base of general technical courses is combined with selected courses in weed control, entomology, pathology, and chemistry to give balance over a broad area with emphasis on particular chemical skills.

## AGRICULTURAL CHEMICALS TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| *ENG 101 | Grammar | 3 | 0 | 3 |
| *MAT 100 | Review of Fundamental Mathematics | 5 | 0 | 5 |
| AGR 125 | Animal Science | 5 | 2 | 6 |
|  | **Agricultural Elective | 3 | $\underline{2}$ | 4 |
|  |  | 16 | 4 | 18 |
| SECOND QUART | TER |  |  |  |
| ENG 102 | Composition | 3 | 0 | 3 |
| AGR 185 | Soil Science and Fertilizers | 5 | 2 | 6 |
| ACT 150 | Principles of Accounting | 3 | 2 | 4 |
| CHM 102 | Introduction to General Chemistry | 4 | 2 | 5 |
|  |  | 15 | 6 | 18 |


| THIRD QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| CHM | 103 | General Chemistry II | 4 | 2 | 5 |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |
| AGR | 170 | Plant Science | 5 | 2 | 6 |
| $\begin{aligned} & \text { BUS } \\ & \text { or } \end{aligned}$ | 102 | Beginning Typewriting |  |  |  |
| BUS | 103 | Intermediate Typewriting | 2 | 3 | 3 |
|  |  |  | 17 | 7 | 20 |
| FOURTH QUARTER |  |  |  |  |  |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| AGR | 278 | Weed Identification and Control | 3 | 2 | 4 |
| BUS | 232 | Sales Development | 3 | 0 | 3 |
| AGR | 228 | Plant and Animal Diseases | 3 | 2 | 4 |
| CHM | 106 | Organic Chemistry | 4 | $\underline{2}$ | 5 |
|  |  |  | 16 | 6 | 19 |
| FIFTH QUARTER |  |  |  |  |  |
| AGR | 119 | Techniques of Welding | 2 | 3 | 3 |
| AGR | 204 | Agricultural Economics and Farm Records | 3 | 2 | 4 |
| AGR | 225 | Agricultural Pollution Control | 3 | 2 | 4 |
| ***AGR | 205 | Agricultural Marketing | 3 | 2 | 4 |
|  |  | **Social Science Elective | $\underline{3}$ | $\underline{0}$ | $\underline{3}$ |
|  |  |  | 14 | 9 | 18 |
| SIXTH QUARTER |  |  |  |  |  |
| AGR | 203 | Pesticide and Fertilizer Application | 3 | 2 | 4 |
| ***AGR | 247 | Pesticides and Their Use in Home and Community | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| AGR | 245 | Crop Insects | 3 | 2 | 4 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 14 | 8 | 18 |

TOTAL QUARTER HOURS ..... 111
*If students, as a result of placement tests or grades, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following lists:
ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 099, MAT 100R.
**The agricultural chemicals technology student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

Agricultural: AGR 155, 218, 272, 273, 279, 290
English: ENG 105
Environmental: ENV 101, 103, 104
Social Science: AGR 296; PSY 101, 102, 206; SOC 101, 102, 103; SSC 101;
ECO 108; COE 100
Business: BUS 100, 103, 123, 154, 166, 167, 229, 235, 239; ACT 151
***AGR 218 may be substituted for AGR 205.
***AGR 273 may be substituted for AGR 247.

## AGRICULTURAL SCIENCE

The Agricultural Science curriculum provides a training program for developing the basic knowledge and skills needed for the successful operation and management of a general farming program involving crops and livestock. Agribusiness firms are seeking trained personnel with technical knowledge and skills in the Agricultural Sciences. Modern farm production units also require trained managers in economics, business management, and technical skills in production practices. The objective of the curriculum is to provide technically trained personnel for managerial positions in agribusiness, as well as managerial and operative skills in production agriculture.

## AGRICULTURAL SCIENCE SUGGESTED CURRICULUM BY QUARTER

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| AGR 135 | Agricultural Law | 3 | 0 | 3 |
| AGR 185 | Soil Science and Fertilizers | 5 | 2 | 6 |
|  |  | 8 | 2 | 9 |
| SECOND QUART |  |  |  |  |
| AGR 205 | Agricultural Marketing | 3 | 2 | 4 |
| AGR 127 | Animal Nutrition | 3 | 2 | 4 |
|  |  | 6 | 4 | 8 |
| THIRD QUARTER |  |  |  |  |
| AGR 119 | Techniques of Welding | 2 | 3 | 3 |
| AGR 279 | Farm Forestry | 3 | 2 | 4 |
|  |  | 5 | 5 | 7 |
| FOURTH QUART |  |  |  |  |
| AGR 222 | Farm Electrification | 3 | 2 | 4 |
| AGR 215 | Farm Machinery Repair and Maintenance | 3 | $\underline{2}$ | 4 |
|  |  | 6 | 4 | 8 |
| FIFTH QUARTER |  |  |  |  |
| AGR 228 | Plant and Animal Diseases | 3 | 2 | 4 |
| AGR 278 | Weed Identification and Control | 3 | $\underline{2}$ | 4 |
|  |  | 6 | 4 | 8 |
| SIXTH QUARTER |  |  |  |  |
| AGR 204 | Agricultural Economics and Farm Records | 3 | 2 | 4 |
| AGR 223 | Livestock Production | 3 | 2 | 4 |
|  |  | 6 | 4 | 8 |
| SEVENTH QUART |  |  |  |  |
| AGR 218 | Agricultural Mechanization | 3 | 2 | 4 |
| AGR 105 | Pastures and Forage Crops | 3 | $\underline{2}$ | 4 |
|  |  | 6 | 4 | 8 |


| EIGHTH QUARTER COURSE TITLE | C | L | CH |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| AGR 245 | Crop Insects | 3 | 2 | 4 |
| AGR 149 | Introduction to Plant Science and Horticulture | $\frac{3}{2}$ | $\frac{2}{4}$ | $\frac{4}{8}$ |

## NINTH QUARTER

| AGR | 201 | Agricultural Chemicals (Pesticides) | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGR | 187 | Fertilizers and Lime | $\frac{3}{6}$ | $\frac{2}{4}$ | $\frac{4}{8}$ |


| TENTH QUARTER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| *AGR | 136 | Agricultural Mathematics | 5 | 0 | 5 |
| AGR | 290 | Soil and Water Conservation | $\frac{3}{2}$ | $\frac{2}{2}$ | $\frac{4}{9}$ |

## ELEVENTH QUARTER

$\begin{array}{lllll}\text { AGR } 128 & \text { Farm and Home Construction } & 2 & 3 & 3\end{array}$
AGR 121 Crop Production
$\underline{3} \quad \underline{4}$
$\begin{array}{lll}5 & 5 & 7\end{array}$
TWELFTH QUARTER
$\begin{array}{lllll}\text { AGR } 272 & \text { Tobacco Production } & 3 & 2\end{array}$
$\begin{array}{lll}A G R & 254 & \text { Plant Propagation } \\ \frac{3}{6} & \frac{2}{4} & \frac{4}{8}\end{array}$
TOTAL QUARTER HOURS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 96
REQUIRED ENGLISH COURSES:

| *ENG | 101 | Grammar | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |

TOTAL QUARTER HOURS

## ELECTIVES:

Two Social Science Electives from the following:
PSY- 102 General Psychology $\quad 3 \quad 0 \quad 3$
PSY 206 Applied Psychology $\quad 3 \begin{array}{lll}3 & 0 & 3\end{array}$
$\begin{array}{llllll}\text { SOC } & 102 & \text { Principles of Sociology } & 3 & 0 & 3\end{array}$
SOC 103 Social Problems $\quad 3 \begin{array}{lll}3 & 0 & 3\end{array}$
SSC 101 Introduction to Social Science $\quad 3 \begin{array}{lll}3 & 0 & 3\end{array}$
TOTAL QUARTER HOURS ..... 6
TOTAL QUARTER HOURS REQUIRED FOR ASSOCIATE DEGREE ..... 114
*If students, as a result of placement tests or grades, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:
ENG $100 \mathrm{R}-1,100 \mathrm{R}-2,100 \mathrm{R}-3,100 \mathrm{G}, 100 \mathrm{G}-\mathrm{A}, 101-\mathrm{A}, 102-\mathrm{A}$; MAT 099, 100 R .
Upon approval of the department chairperson, the agricultural science student may make course substitutions on a credit-for-credit basis from the agricultural science courses listed below.

## RECOMMENDED ELECTIVES:

Agricultural: AGR 112, 135, 149, 150, 154, 155, 188, 203, 207, 227, 273, 297

## AGRICULTURAL SCIENCE AND MECHANIZATION VETERANS FARM COOPERATIVE PROGRAM (WITH TECHNICAL SPECIALTY OPTION)

This curriculum provides a training program for developing the basic knowledge and skills needed for the successful operation and management of a general farming program involving crops and livestock. There is a scarcity of people trained in basic agricultural science and mechanization. Larger farming operations require more mechanization and tremendous outlays of capital; thus, the need for trained farmers becomes increasingly critical.

The graduates of the Agricultural Science and Mechanization Curriculum are trained to manage and operate a farm. In addition, they should be able to perform most of the repairs to buildings and equipment, as well as perform the necessary electrical, construction, and plumbing operations pertaining to the farm.

The satisfactory completion of a minimum of 18 hours of general education in addition to the technical specialty courses will lead to an Associate in Applied Science Degree.

## AGRICULTURAL SCIENCE AND MECHANIZATION VETERANS FARM COOPERATIVE PROGRAM (WITH TECHNICAL SPECIALTY OPTION) SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| AGR 135 | Agricultural Law | 3 | 0 | 3 |
| AGR 185 | Soil Science and Fertilizers | 5 | 2 | 6 |
|  |  | 8 | 2 | 9 |
| SECOND QUARTER |  |  |  |  |
| AGR 205 | Agricultural Marketing | 3 | 2 | 4 |
| AGR 127 | Animal Nutrition | 3 | 2 | 4 |
|  |  | 6 | 4 | 8 |
| THIRD QUARTER |  |  |  |  |
| AGR 119 | Techniques of Welding | 2 | 3 | 3 |
| AGR 279 | Farm Forestry | 3 | 2 | 4 |
|  |  | 5 | 5 | 7 |
| FOURTH QUARTER |  |  |  |  |
| AGR 222 | Farm Electrification | 3 | 2 | 4 |
| AGR 215 | Farm Machinery Repair and Maintenance | 3 | $\underline{2}$ | 4 |
|  |  | 6 | 4 | 8 |



## AIR AND WATER TECHNOLOGY

The responsibility for solving environmental problems at the state level rests mainly with the N. C. Department of Natural and Economic Resources, Air and Water Resources Division, and the N. C. Department of Human Resources. In addition to these agencies, the Department of Transportation, private industry, and the municipalities and counties of the state must develop staffs knowledgeable in the solution of environmental problems to ensure compliance with state and federal antipollution regulations. Many of these staff positions can be filled by well-trained technicians knowledgeable in air pollution, water purification, water pollution, solid waste pollution, and other sanitation fields.

This curriculum is designed to train technicians to be aware of the impact their technical field exerts on the entire environment and to be able to communicate with those outside their technical field as well as those within. Graduates of the program will be knowledgeable about state and federal laws related to air and water pollution and the solutions to environmental problems. They will be trained to operate and maintain sampling, testing, and analytical equipment required in the area of water purification and air and water pollution detection and control.

A graduate of this program is qualified for entry into positions such as physical science technician GS-4, air pollution control technician, water pollution control technician, industrial waste technician, public health sanitation aide, laboratory technician, environmental monitoring technician, environmental engineering technician II, water treatment plant operator, waste water treatment plant operator, and technical sales and services of equipment and chemicals in related fields.

## AIR AND WATER TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: |
| ENV 101 | Environmental Orientation | 4 | 2 | 5 |
| ENV 103 | General Biology | 3 | 2 | 4 |
| *MAT 100 | Review of Fundamental Mathematics | 5 | 0 | 5 |
| *ENG 101 | Grammar | 3 | 0 | 3 |
|  |  | 15 | 4 | 17 |
| SECOND QUART |  |  |  |  |
| ENV 105 | Environmental Microbiology | 2 | 4 | 4 |
| CHM 102 | Introduction to General Chemistry | 4 | 2 | 5 |
| MAT 101 | Algebra 1 | 5 | 0 | 5 |
| ENG 102 | Composition | 3 | 0 | 3 |
|  |  | 14 | 6 | 17 |


| THIRD QUARTER COURSE TITLE |  |  | C | 1 | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENV | 104 | Environmental Biology | 4 | 2 | 5 |
| CHM | 103 | General Chemistry II | 4 | 2 | 5 |
| ENV | 115 | Environmental Physics I | 3 | 2 | 4 |
| MAT | 103 | Algebra II | 5 | 0 | 5 |
|  |  |  | 16 | 6 | 19 |
| FOURTH QUARTER |  |  |  |  |  |
| ENV | 112 | Air Resources Management | 3 | 2 | 4 |
| ENV | 107 | Water Resources Management | 4 | 2 | 5 |
| CHM | 104 | General Chemistry III | 4 | 2 | 5 |
| ENV | 116 | Environmental Physics II | 3 | 2 | 4 |
|  |  |  | 14 | 8 | 18 |
| FIFTH QUARTER |  |  |  |  |  |
| ENV | 212 | Air Pollution Sources and Control | 3 | 4 | 5 |
| ENV | 217 | Waste Water Treatment | 3 | 2 | 4 |
| ENV | 201 | Environmental Laboratory I | 3 | 4 | 5 |
|  |  | **Elective | 3-5 | 0-2 | 3-5 |
|  |  |  | 12-14 | 10-12 | 17-19 |
| SIXTH QUARTER |  |  |  |  |  |
| ENV | 205 | Environmental Laboratory II | 2 | 4 | 4 |
| ENV | 218 | Environmental Instrumentation I | 2 | 4 | 4 |
| ENV | 226 | Atmospheric Air Sampling | 2 | 6 | 5 |
| ENG | 103 | Report Writing |  | 0 | 3 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 12 | 14 | 19 |
| SEVENTH QUARTER |  |  |  |  |  |
| ENV | 236 | Air Pollution Source Sampling and Anaylsis | 2 | 6 | 5 |
| ENV | 219 | Environmental Instrumentation II | 2 | 4 | 4 |
| ENV | 200C | Environmental Project | 0 | 9 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 10 | 19 | 18 |
| TOTAL QU | UART | ER HOURS |  | .. 1 | 25-127 |

*If students, as a result of placement tests or grades, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A; MAT 100R.
**The air and water technology student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

AGR 185, 247, 290; ARC 106, 107, 202; CHM 106; CIV 101; DFT 101; ECO 108; EDP 114; ENV 200A,B, 220 A,B,C, 230A,B,C, 240A,B,C,; 225; ISC 102; MAT 102, 104, 120, 150; PHO 116; PHY 101, 107; PSY 102, 206; SOC 102, 103; SSC 101; COE 100, 101-106

Cooperative Education does not qualify for veterans' benefits.

## ARCHITECTURAL DRAFTING TECHNOLOGY

Architectural drafting technicians are concerned with turning the architect's design sketches into complete and accurate working plans and detailed drawings for construction purposes. They may prepare floor plans, elevation drawings, construction details, and mechanical equipment layouts and door, window, and room schedules and site plans. The drafting technician may be involved in work in areas such as industry, engineering, building construction, specification writing, construction models, or architectural rendering. The technician communicates the architect's design to the builder in the form of working drawings.

Graduates should be competent drafting personnel, well informed on the building industry in general, the operation of architect's offices, and knowledgeable about materials and techniques of construction. Their training includes an appreciation of the mechanical, electrical, and structural aspects of buildings. Basic training in oral and written communication offers graduates a background for developing their potential in broader aspects of architectural practice, such as specification writing and supervision of construction.

## ARCHITECTURAL DRAFTING TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| 82 | FIRST QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CIV 105 | Architectural Materials and Methods I | 3 | 3 | 4 |
|  | ARC 106 | Architectural Drafting | 2 | 6 | 4 |
|  | *ENG 101 | Grammar | 3 | 0 | 3 |
|  | *MAT 101 | Algebra 1 | 5 | 0 | 5 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 16 | 9 | 19 |
| SECOND QUARTER |  |  |  |  |  |
|  | ARC 107 | Architectural Drafting | 2 | 6 | 4 |
|  | AHR 106 | Architectural Mechanical Equipment | 3 | 3 | 4 |
|  | ENG 102 | Composition | 3 | 0 | 3 |
|  | MAT 102 | Trigonometry | 5 | 0 | 5 |
|  | PHY 101 | Technical Physics | 4 | 2 | 5 |
|  |  |  | 17 | 11 | 21 |
| THIRD QUARTER |  |  |  |  |  |
|  | ARC 108 | Architectural Drafting | 0 | 9 | 3 |
|  | DFT 236 | Construction Estimating and Field Inspecting | 3 | 3 | 4 |
|  | ENG 204 | Oral Communications | 3 | 0 | 3 |
|  | MAT 103 | Algebra II | 5 | 0 | 5 |
|  | PHY 102 | Technical Physics | 4 | 2 | 5 |
|  |  |  | 15 | 14 | 20 |


| FOURTH QUARTER | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ARC 201 Architectural Design I 3 <br> 9 6   <br> CIV 106 Architectural Materials and Methods II 3 <br> ARC 202 Environmental Design $\frac{2}{8}$ | $\frac{3}{15}$ | $\frac{3}{13}$ |  |  |

In lieu of the fourth quarter courses, students, with department chairperson's approval, may work as a cooperative education intern full time in a related area of employment. (Cooperative Education courses do not qualify for veterans' benefits.)

## FIFTH QUARTER

| CIV | 114 | Statics | 5 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CIV | 101 | Surveying | 2 | 6 | 4 |
| ARC | 220 | Architectural Drafting | 2 | 9 | 5 |
| PHY | 103 | Technical Physics | 4 | 2 | 5 |
| ENG | 103 | Report Writing | $\underline{3}$ | $\underline{0}$ | $\underline{3}$ |
| 16 | $\underline{17}$ | 22 |  |  |  |


| SIXTH QUARTER |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CIV | 216 | Strength of Materials | 3 | 2 | 4 |
| ARC | 221 | Architectural Drafting | 2 | 9 | 5 |
| DFT | 235 | Codes, Specifications, and Contract Documents | 3 | 3 | 4 |
| ARC | 233 | Office Practice Seminar | 2 | 0 | 2 |
|  |  | **Social Science Elective | 3 | $\underline{0}$ | 3 |
|  |  |  | 13 | 14 | 18 |

## SEVENTH QUARTER

| CIV | 221 | Reinforced Concrete Construction | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ARC | 222 | Architectural Drafting | 2 | 9 | 5 |
| DFT | 230 | Structural Drafting | $\underline{2}$ | $\underline{6}$ | $\underline{4}$ |
|  |  |  | $\mathbf{7 7}$ | $\mathbf{1 3}$ |  |

TOTAL QUARTER HOURS ..... 126
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:
ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 100R, 100.
**The architectural drafting technology student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

ENG 105; PSY 101, 102, 206; SOC 101, 102, 103; SSC 101; COE 100

## BANKING AND FINANCE

The purpose of the banking and finance curriculum are to prepare the individual to enter the banking and finance industries, to provide an educational program for the banking employee wanting to receive the American Institute of Banking certificate, and to provide an educational program to upgrade or retrain individuals presently employed in the banking or finance industry. These purposes will be fulfilled through study in areas such as banking and finance principles, theories and practices; teller operation; lending and collections procedures; financial analysis; and marketing and public relations.

This curriculum will provide the opportunity for an individual to enter a variety of banking or finance jobs in retail banks, commercial manks, government lending agencies, mortgage banks, and credit companies.

## BANKING AND FINANCE SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER |  | COURSE TITLE | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AIB | 120 | Accounting I | 4 | 0 | 4 |
| AIB | 202 | Principles of Bank Operation | 4 | 0 | 4 |
| ECO | 150 | Economics I | 3 | 0 | 3 |
| *ENG | 101 | Grammar | 3 | 0 | 3 |
| *MAT | 110 | Business Mathematics | 5 | 0 | 5 |
|  |  |  | 19 | 0 | 19 |
| SECOND QUARTER |  |  |  |  |  |
| AIB | 111 | Business Administration | 4 | 0 | 4 |
| AIB | 121 | Accounting II | 4 | 0 | 4 |
| AIB | 210 | Money and Banking | 4 | 0 | 4 |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
|  |  |  | 18 | 0 | 18 |
| THIRD QUARTER |  |  |  |  |  |
| AIB | 205 | Bank Management | 4 | 0 | 4 |
| AIB | 212 | Planning Management Development | 0 | 2 | 1 |
| AIB | 214 | Effective Speaking | 4 | 0 | 4 |
| AIB | 231 | Savings and Time Deposit Banking | 4 | 0 | 4 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
|  |  |  | 15 | 2 | 16 |
| FOURTH QUARTER |  |  |  |  |  |
| AIB | 203 | Bank Investments | 4 | 0 | 4 |
| AIB | 206 | Bank Letters and Reports | 4 | 0 | 4 |
| AIB | 208 | Conference Planning and Leadership | 0 | 2 | 1 |
| AIB | 219 | Credit Administration | 4 | 0 | 4 |
| AIB | 234 | Loss Prevention | 0 | 2 | 1 |
| SOC | 102 | Principles of Sociology | 3 | 0 | 3 |
|  |  |  | 15 | 4 | 17 |


*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 099, 100R.
The banking and finance student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

AIB 123, 207, 232, 237; BUS 102, 110; COE 100; ENG 105

## BUSINESS ADMINISTRATION

The Business Administraton Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in administrative work that might be encountered in the average business.

The Business Administration Curriculum aims to develop the following competencies:

1. Understanding of the principles of organization and management in business operations;
2. Understanding the economy through study and analysis of the role of production and marketing;
3. Knowledge in specific elements of accounting, finance, and business law;
4. Understanding and skill in effective communication for business; and
5. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.
The graduate of the Business Administration Curriculum may enter a variety of positions from beginning salesperson or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms, including preparing and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising personnel.

## BUSINESS ADMINISTRATION SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | Cr |
| :---: | :---: | :---: | :---: | :---: |
| *ENG 101 | Grammar | 3 | 0 | 3 |
| BUS 165 | Introduction to Business | 5 | 0 | 5 |
| ECO 150 | Economics I | 3 | 0 | 3 |
| *MAT 110 | Business Mathematics | 5 | 0 | 5 |
| ACT 150 | Principles of Accounting | 3 | 2 | 3 |
|  |  | 19 | 2 | 20 |
| SECOND QUART |  |  |  |  |
| ENG 102 | Composition | 3 | 0 | 3 |
| ECO 151 | Economics II | 3 | 0 | 3 |
| BUS 166 | Business Law 1 | 3 | 0 | 3 |
| ACT 151 | Principles of Accounting | 3 | 2 | 4 |
| BUS 102 | Beginning Typewriting | 2 | 3 | 3 |
|  |  | 14 | 5 | 16 |


*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG $100 \mathrm{R}-1,100 \mathrm{R}-2,100 \mathrm{R}-3,100 \mathrm{R}-4,100 \mathrm{G}, 100 \mathrm{G}-\mathrm{A}, 101-\mathrm{A}, 102-\mathrm{A}$; MAT 099, 100R.
**The business administration student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 103, 112, 219, 222, 223, 225, 231; ECO 108; ENG 105, 106; POL 102, 103; PSY 206; SOC 102, 103; SSC 101; COE 100; INS 214, 215, 216.

## CAREER OPTION NURSING EDUCATION

The Career Option Nursing Education Program is based on the concept that two levels provide training leading to a career either as a Licensed Practical Nurse or Registered Nurse. Level I is basic to the LPN and the Associate Degree programs. Upon completing Level I, students will either take the LPN examination or continue with Level II in order to complete the requirements to qualify for the licensing examination for Registered Nurse.

Level I, the LPN portion of the instruction, is concerned with the knowledge and techniques necessary for bedside nursing care, meeting the daily needs of patients, and assisting the registered nurse with complex nursing procedures. Instruction for Level II or the remaining requirements for the Associate Degree is concerned with the knowledge and skills needed in all aspects of the patient's daily needs, assisting the patient in becoming independent or rehabilitated, and directing the patients care. Level II presents progressively more complex technical theory, experience, and responsibility as a professional nurse trainee.

Curriculum currently under revision.


## CAREER OPTION NURSING EDUCATION SUGGESTED CURRICULUM BY QUARTERS

| Nursing I |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRST QUARTER COURSE TITLE |  |  | C | L | CL | CH |
| NUR | 101 | Fundamentals of Nursing | 6 | 6 | 0 | 9 |
| BIO | 101 | Basic Life Sciences | 4 | 2 | 0 | 5 |
| ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| NUT | 101 | Basic Nutrition | 3 | 0 | 0 | 3 |
| MAT | 114 | Basic Math for Health Professions | 3 | 0 | 0 | 3 |
|  |  |  | 19 | 8 | 0 | 23 |
| SECOND QUARTER |  |  |  |  |  |  |
| NUR | 102 | Medical-Surgical Nursing I | 8 | 0 | 15 | 13 |
| NUR | 110 | Pharmacology | 3 | 0 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
|  |  |  | 14 | 0 | 15 | 19 |
| THIRD QUARTER |  |  |  |  |  |  |
| $\begin{gathered} \text { NUR } \\ \text { or } \end{gathered}$ | 103 | Medical-Surgical Nursing II | 9 | 0 | 15 | 14 |
| NUR | 104 | Maternal Child Health Nursing I | 8 | 0 | 15 | 13 |
| PSY | 120 | Human Growth and Development | 3 | 0 | 0 | 3 |
| +BIO | 106 | Microbiology | 2 | 2 | 0 | 3 |
|  |  |  | 13-14 | 2 | 15 | 19-20 |
| FOURTH QUARTER |  |  |  |  |  |  |
| NUR or | 103 | Medical-Surgical Nursing II | 9 | 0 | 15 | 14 |
| NUR | 104 | Maternal Child Health Nursing I | 8 | 0 | 15 | 13 |
| NUR | 131 | Nursing Seminar | 3 | 0 | 0 | 3 |
| + CHM | 110 | Chemistry for Nurses | 2 | 2 | 0 | 3 |
|  |  |  | 13-14 | 2 | 15 | 19-20 |

TOTAL QUARTER HOURS FOR PRACTICAL NURSES ..... 75
+Required only for students entering the fifth quarter.

## Nursing II

| FIFTH | QUA | TER COURSE TITLE | C | L | CL | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NUR | 201 | Advanced Maternity Nursing | 3 | 0 | 8 | 6 |
| NUR | 203 | Clinical Nursing I | 2 | 0 | 8 | 5 |
| BIO | 201 | Human Anatomy and Physiology I | 3 | 2 | 0 | 4 |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |
|  |  |  | 11 | 2 | 16 | 18 |
| SIXTH | QUA | TER |  |  |  |  |
| NUR | 204 | Clinical Nursing II | 6 | 0 | 16 | 11 |
| BIO | 202 | Human Anatomy and Physiology II | 3 | 2 | 0 | 4 |
|  |  |  | 9 | 2 | 16 | 15 |
| SEVEN | NTH Q | ARTER |  |  |  |  |
| NUR | 202 | Psychiatric Nursing | 6 | 0 | 15 | 11 |
| *SOC | 102 H | Principles of Sociology (Health Professions) | 3 | 0 | 0 | 3 |
|  |  |  | 9 | 2 | 15 | 14 |
| EIGHT | TH QU | RTER |  |  |  |  |
| NUR | 205 | Clinical Nursing III | 5 | 0 | 18 | 11 |
| NUR | 231 | Nursing Seminar | 3 | 0 | 0 | 3 |
|  |  |  | 8 | 0 | 18 | 14 |
| NUR | 235 | Special Problems in Nursing <br> (Elective-Not Required) | 0 | 4 | 0 | 2 |
|  |  | Total Credit Hours for Second Level |  |  |  | 67 |
|  |  | Total Credit Hours for First Level |  |  |  | 75 |
| TOTAL | L QU | RTER HOURS FOR ASSOCIATE DEGR |  |  |  |  |
| **Th list sub ap |  | r Option Nursing Education student ommended electives or from other ns from appropriate subject areas by the student's department chairpers | lecti | dit |  |  |

## Curriculum currently under revision.



## COMMERCIAL ART AND GRAPHIC DESIGN

Surveys have shown an increase in the demand for graduates possessing training in the field of commercial art and graphic design. This curriculum will prepare graduates with broad backgrounds for technical and creative achievement throughout their professional lives. Design and illustration for commerce is continually advancing its standards; therefore, the background offered the students must be well developed to prepare them for performance on a contemporary, professional level. Graduates of this program will have an adequate background in illustration, layout and lettering, design, and production.

Equipped with professional competency and the potential for continuing growth and improvement, graduates are qualified for employment in advertising agencies, design studios, department stores, industrial advertising departments, government agencies, newspapers, television studios, and printing and publishing houses.

Their activities may include designing layouts and illustrations for printing; creating posters, sign boards, billboards, and show cards; or illustrating package designs. Such a career affords the individual an opportunity for creativity and continuing professional growth and improvement.

## COMMERCIAL ART AND GRAPHIC DESIGN SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH | 91 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |  |
| CAT | 102 | Drawing 1 | 1 | 4 | 3 |  |
| CAT | 107 | Drafting for Art | 1 | 3 | 2 |  |
| CAT | 121 | Design I | 3 | 6 | 6 |  |
| *MAT | 100 | Review of Fundamental Mathematics | 5 | 0 | 5 |  |
|  |  |  | 12 | 16 | 19 |  |
| SECOND QUARTER |  |  |  |  |  |  |
| CAT | 103 | Drawing II | 1 | 4 | 3 |  |
| CAT | 108 | Drafting for Art | 1 | 3 | 2 |  |
| CAT | 110 | Art History to 1300 | 3 | 0 | 3 |  |
| CAT | 122 | Design II | 3 | 6 | 6 |  |
| ${ }^{\text {'ENG }}$ | 101 | Grammar | 3 | 0 | 3 |  |
|  |  |  | 11 | 13 | 17 |  |
| THIRD QUARTER |  |  |  |  |  |  |
| CAT | 104 | Drawing III | 1 | 4 | 3 |  |
| CAT | 111 | Art History Since 1300 | 3 | 0 | 3 |  |
| CAT | 123 | Layout and Design I | 2 | 6 | 5 |  |
| ENG | 102 | Composition | 3 | 0 | 3 |  |
| PHO | 116 | Photography | 2 | 4 | 4 |  |
|  |  |  | 11 | 14 | 18 |  |


| FOURTH QUARTER | COURSE TITLE | C | L | CH |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| CAT | 109 | Drawing IV | 1 | 4 | 3 |
| CAT | 120 | Illustration Techniques | 1 | 4 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
|  |  |  | **Social Science Elective | $\frac{3}{2}$ | $\frac{0}{8}$ |
|  |  | $\frac{3}{12}$ |  |  |  |

## FIFTH QUARTER

| CAT | 210 | Production Techniques | 1 | 4 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CAT | 212 | Advertising Illustration | 1 | 4 | 3 |
| CAT | 224 | Layout and Design II | 3 | 6 | 6 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| PHO | 217 | Photography | $\frac{2}{10}$ | $\frac{4}{18}$ | $\frac{4}{19}$ |

## SIXTH QUARTER

| CAT | 214 | Type and Letter Form Design | 1 | 4 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CAT | 213 | Advertising Illustration | 1 | 4 | 3 |
| CAT | 225 | Graphic Design I | 3 | 6 | 6 |
|  |  |  | $* *$ Social Science Elective | $\frac{3}{8}$ | $\underline{0}$ |
|  |  | $\frac{3}{14}$ | $\frac{3}{15}$ |  |  |

## ***SEVENTH QUARTER

| CAT | 218 | Photomechanical Techniques | 2 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CAT | 226 | Graphic Design II | 3 | 6 | 6 |
| CAT | 235 | Portfolio Development | $\frac{1}{6}$ | $\frac{4}{16}$ | $\frac{3}{14}$ |

TOTAL QUARTER HOURS ..... 114
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A; MAT 099, 100R.
**The commercial art and graphic design student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

CAT 250; ENG 105; PHO 218, 219, 220; PSY 102, 206; SOC 102, 103; SSC 101; COE 100
***In lieu of seventh quarter courses, students, with department chairperson's approval, may work full-time as a cooperative education intern in a related area of employment. (Co-op Education courses do not qualify for veterans' benefits.)

## CRIMINAL JUSTICE: CORRECTIONS

Correctional officers must be knowledgeable in many areas if they are to function effectively in our complex society. They study specialized areas such as interviewing, counseling, drug abuse, rehabilitation techniques, testing, and community relations. In addition, they must be familiar with the law and the criminal justice system.
To this end, the correctional science program is dedicated to developing proficiency in both pre-service high school graduates and inservice correctional personnel. It offers theoretical and practical instruction to meet the needs and requirements of the various correctional agencies and provides the student with the knowledge, skills, and attitudes necessary for a successful career in the corrections field.

Employment opportunities for graduates of this curriculum are available at state and federal correctional institutions as correctional officers or as correctional program assistants. Youth development correctional officer positions are also available to graduates of this program.

## In-Service Officer Programs

In addition to the regular curriculum, the criminal justice department offers the degree program on a rotating schedule, designed to coincide with the in-service officer's work schedule. The courses are being offered during the day and again at night so the working officer can attend without missing any classes.

In recognition that the in-service officer must divide his time between his personal life, his job, and his school, only one-half of the courses normally offered to full-time students are offered on the rotating schedule. Since the officer is taking a reduced load, four (rather than two) years are required to complete the requirements for the associate in applied science degree.

## CRIMINAL JUSTICE: CORRECTIONS SUGGESTED CURRICULUM BY QUARTERS

|  |  | CIRST QUARTER COURSE TITLE | C | L |
| :--- | :--- | ---: | ---: | ---: |
| CH |  |  |  |  |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 33


|  | SECOND QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CJC | 109 | Interviewing | 3 | 0 | 3 |
|  | CJC | 116 | Criminal Law II | 3 | 0 | 3 |
|  | CJC | 120 | Principles of Organization | 3 | 0 | 3 |
|  | *ENG | 101 | Grammar | 3 | 0 | 3 |
|  | *MAT | 101 | Algebra 1 | 5 | 0 | 5 |
|  | POL | 102 | National Government | 3 | 0 | 3 |
|  |  |  |  | 20 | 0 | 20 |
|  | THIRD | QU | TER |  |  |  |
|  | CJC | 102 | Legal Research 1 | 3 | 0 | 3 |
|  | CJC | 113 | Corrections Law | 3 | 0 | 3 |
|  | CJC | 125 | Criminal Procedure | 3 | 0 | 3 |
|  | ENG | 102 | Composition | 3 | 0 | 3 |
|  | ENG | 204 | Oral Communications | 3 | 0 | 3 |
|  | POL | 103 | State and Local Government | 3 | 0 | 3 |
|  |  |  |  | 18 | 0 | 18 |
|  | FOUR | TH Q | ARTER |  |  |  |
|  | CHM | 101 | Chemistry | 4 | 2 | 5 |
|  | CSC | 201 | Marriage and the Family | 3 | 0 | 3 |
|  | CJC | 205 | Evidence | 3 | 0 | 3 |
|  | CSC | 203 | Survey of Corrections | 3 | 0 | 3 |
|  | PSY | 228 | Abnormal Psychology | 3 | 0 | 3 |
|  | SOC | 102 | Principles of Sociology | 3 | 0 | 3 |
|  |  |  |  | 19 | 2 | 20 |
|  | FIFTH | QUA | TER |  |  |  |
|  | PSC | 213 | Identification Techniques | 3 | 2 | 4 |
|  | CSC | 207 | Confinement Facilities Administration | 3 | 0 | 3 |
|  | CSC | 213 | Dynamics of Substance Abuse | 3 | 0 | 3 |
|  | CSC | 229 | Career Information | 3 | 2 | 4 |
|  | ENG | 103 | Report Writing | 3 |  | 3 |
|  | PSY | 103 | Adolescent Psychology | 3 | 0 | 3 |
| 94 |  |  |  | 18 | 4 | 20 |
|  | SIXTH | QU | TER |  |  |  |
|  | CSC | 226 | Administration and Interpretation of Tests | 3 | 0 | 3 |
|  | CSC | 224 | Rehabilitation Techniques | 3 | 0 | 3 |
|  | CSC | 234 | Community Based Corrections | 3 | 0 | 3 |
|  | PSC | 202 | Police-Community Relations | 2 | 0 | 2 |
|  | PSC | 110 | Juvenile Delinquency | 5 | 0 | 5 |
|  | PSC | 240 | Firearms and Defensive Tactics | 2 | 2 | 3 |
|  |  |  |  | 18 | 2 | 19 |
|  | TOTA | Q Q | RTER HOURS |  |  |  |
|  | *If stud skills, | dents they | a result of placement tests, are found to be Il be required to take the appropriate courses |  |  |  |
|  | ENG | 100R- | 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; | 100R, |  |  |
|  | The appro appro | Crimi oved oval | Justice: Corrections student may select ad urses and make course substitutions on a he student's department chairperson. | ctive <br> credit |  |  |
|  | $\begin{aligned} & { }^{* *} \text { CJC } 1 \\ & \text { for } \mathrm{CJ} \end{aligned}$ | $\begin{aligned} & 151,15 \\ & \text { JC } 10 \end{aligned}$ | $153,154,155$, and 156 totaling 6 quarter hour Introduction to Criminal Justice, which is a 5 | nay $\mathrm{irco}$ |  | uted |

## CRIMINAL JUSTICE: LAW ENFORCEMENT

Today's law enforcement officer is expected to handle matters dealing with human relations; he frequently has to act in legal matters; he must be skilled in the most recent operations techniques in order to insure equality of justice to all. The Law Enforcement Program offers theoretical and practical instruction to meet the requirements of various law enforcement agencies and provides the student with the skills, knowledge, and attitudes necessary for employment in the law enforcement profession. Demand for properly trained law enforcement officers in industry and in municipal, county, state, and federal agencies is increasing, and the highly trained law enforcement officer will find challenging opportunities with public and private law enforcement services.

To the original and primary police functions of preserving the peace and maintaining law and order, the ever-widening scope of government activity has added a host of other duties to the various law enforcement agencies, ranging from the regulation of traffic and the suppression of vice to the enforcement of minor laws and ordinances that regulate the minutiae of business and private life in a modern society.

## Inservice Officer Program

In addition to the regular curriculum, the Law Enforcement Department offers the degree program on a rotating schedule, designed to coincide with the inservice officer's work schedule. The courses are being offered during the day and again at night so the working officer can attend without missing any classes.
In recognition that the inservice officer must divide his time between his personal life, his job, and his school, only one-half of the courses normally offered to full-time students are offered on the rotating schedule. Since the officer is taking a reduced load, it requires four rather than two years to complete the requirements for the associate in applied science degree.

## CRIMINAL JUSTICE: LAW ENFORCEMENT SUGGESTED CURRICULUM BY QUARTERS

$\left.\begin{array}{lllll} & & & \text { CIRST QUARTER COURSE TITLE } & \text { C }\end{array}\right)$ CH

| SECOND QUARTER COURSE TITLE |  | C | L | CH |  |
| :---: | :--- | :--- | ---: | ---: | ---: |
| CJC | 109 | Interviewing | 3 | 0 | 3 |
| CJC | 116 | Criminal Law II | 3 | 0 | 3 |
| CJC | 120 | Principles of Organization | 3 | 0 | 3 |
| *ENG | 101 | Grammar | 3 | 0 | 3 |
| *MAT | 101 | Algebra I | 5 | 0 | 5 |
| POL | 102 | National Government | $\frac{3}{20}$ | $\underline{0}$ | $\frac{3}{0}$ |

THIRD QUARTER

| CJC | 102 | Legal Research I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CJC | 113 | Corrections Law | 3 | 0 | 3 |
| CJC | 125 | Criminal Procedure | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| POL | 103 | State and Local Government | $\frac{3}{18}$ | $\frac{0}{0}$ | $\frac{3}{18}$ |

## FOURTH QUARTER

| CHM | 101 | Chemistry | 4 | 2 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CJC | 205 | Evidence | 3 | 0 | 3 |
| CJC | 211 | Criminalistics | 4 | 2 | 5 |
| CSC | 203 | Survey of Corrections | 3 | 0 | 3 |
| PSY | 228 | Abnormal Psychology | 3 | 0 | 3 |
| SOC | 102 | Principles of Sociology | $\frac{3}{20}$ | $\underline{0}$ | $\frac{3}{2}$ |
|  |  |  |  |  |  |

## FIFTH QUARTER

## 96

| CJC | 204 | Evidence Photography |
| :--- | :--- | :--- |
| CSC | 213 | Dynamics of Substance Abuse |
| ENG | 103 | Report Writing |
| PSC | 201 | Patrol Procedures |
| PSC | 213 | Identification Techniques |

CJC 204 Evidence Photography

| 3 | 3 | 4 |
| ---: | ---: | ---: |
| 3 | 0 | 3 |
| 3 | 0 | 3 |
| 4 | 2 | 5 |
| $\frac{3}{16}$ | $\frac{2}{7}$ | $\frac{4}{19}$ |

## SIXTH QUARTER

| CJC | 210 | Criminal Investigation | 4 | 2 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CJC | 235 | Forensic Science | 3 | 2 | 4 |
| PSC | 110 | Juvenile Delinquency | 5 | 0 | 5 |
| PSC | 202 | Police-Community Relations | 2 | 0 | 2 |
| PSC | 240 | Firearms and Defensive Tactics | $\underline{2}$ | $\frac{2}{16}$ | $\frac{3}{19}$ |

TOTAL QUARTER HOURS ..... 118
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:
ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 099, 100R, 100.
The Criminal Justice: Law Enforcement student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.
** CJC 151, 152, 153, 154, 155, and 156 totaling 6 quarter hours of credit may be substituted for CJC 100 Introduction to Criminal Justice, a 5 credit-hour course.

## EARLY CHILDHOOD ASSOCIATE

This curriculum is designed to prepare students for directing or teaching in a day care center. Courses in administration, food for children, working with parents, and planning and directing learning activities for young children are emphasized.

The graduate of the Early Childhood Associate Program will be qualified to work in developmental child care centers, day care facilities, and public and private schools and preschools.

## EARLY CHILDHOOD ASSOCIATE SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CL. | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDU | 102 | Child Health and Safety | 3 | 0 | 0 | 3 |  |
| EDU | 103 | Preschool Orientation | 1 | 0 | 6 | 3 |  |
| *MAT | 100R | Computational Skills | 5 | 0 | 0 | 5 |  |
| PSY | 115 | Child Growth and Development: Prenatal-Early Childhood | 3 | 0 | 0 | 3 |  |
| SPH | 150 | Voice and Diction | 3 | 0 | 0 | 3 |  |
|  |  |  | 15 | 0 | 6 | 17 |  |
| SECOND QUARTER |  |  |  |  |  |  |  |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 0 | 3 |  |
| EDU | 104 | Preschool Observation | 1 | 0 | 6 | 3 |  |
| EDU | 231 | Creative Activities | 5 | 0 | 0 | 5 |  |
| *ENG PSY | 101 | Grammar | 3 | 0 | 0 | 3 |  |
|  | 116 | Child Growth and Development: Middle Childhood-Adolescence | 3 | 0 | 0 | 3 | 97 |
| PSY | 102 | General Psychology | 3 | 0 | 0 | 3 |  |
|  |  |  | 17 | 3 | 6 | 20 |  |
| THIRD QUARTER |  |  |  |  |  |  |  |
| EDU | 111 | Language Arts Techniques I | 5 | 0 | 0 | 3 |  |
| EDU | 115 | Audiovisual and Media Instruction | 3 | 0 | 0 | 3 |  |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |  |
| SOC | 101 | Introduction to Sociology | 5 | 0 | 0 | 5 |  |
|  | **Elective |  | 3 | $\underline{0}$ | 0 | 3 |  |
|  |  |  | 19 | 0 | 0 | 19 |  |
| FOURTH QUARTER |  |  |  |  |  |  |  |
| ENG | 103 | Report Writing | 3 | 0 | 0 | 5 |  |
| EDU | 203 | Exceptional Child | 4 | 0 | 0 | 4 |  |
|  | **Elective |  | $\frac{4}{12}$ | 0 | 0 | $\frac{1}{12}$ |  |
| FIFTH QUARTER |  |  |  | 0 | 0 | 3 |  |
| EDU | 202 | Discipline Strategies in the Classroom | 3 | 0 | 15 | 6 |  |
| EDU | 225A | Seminar-Practicum: Preschool | 1 | 0 | - | 5 |  |
| EDU | 230 | Preschool Education | 5 3 | 2 | 0 | 4 |  |
| NUT | 102 | Food for Children | $\frac{3}{12}$ | $\frac{2}{2}$ | $\frac{0}{15}$ | $\overline{18}$ |  |


*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A; MAT 099.
**The early childhood associate student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 110, 112, 134; CAT 110; ECO 102; ENG 105, 106; PHY 120; POL 102; PSY 206; SOC 103; SSC 101; COE 100; and/or any college transfer course as approved by the department chairperson. Students may elect to participate in Cooperative Education Field Experience: COE 101-106.

## EDUCATIONAL ASSOCIATE

This curriculum is designed to prepare students as assistants to classroom teachers in social and educational fields. The program provides a course of study for individuals who have the desire and capability to work with primary and elementary school children under the supervision of the classroom teacher. Study and application will be employed in areas such as language arts, math, child growth and development, curriculum activities, and preparation of educational materials.
The graduate of the Education Associate Program will be qualified to enter the field of education as a paraprofessional, performing duties required of a teacher aide. The role of the teacher aide will vary from school to school. The aide may be assigned as a general instructional aide, clerical aide, or tutorial aide, depending on the particular needs of the school.

## EDUCATIONAL ASSOCIATE SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CL | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDU | 102 | Child Health and Safety | 3 | 0 | 0 | 3 |  |
| EDU | 103 | Preschool Orientation | 1 | 0 | 6 | 3 |  |
| MAT | 100R | Computational Skills | 5 | 0 | 0 | 5 |  |
| PSY | 115 | Child Growth and Development: Prenatal-Early Childhood | 3 | 0 | 0 | 3 |  |
| SPH | 150 | Voice and Diction | 3 | 0 | 0 | 3 |  |
|  |  |  | 15 | 0 | 6 | 17 |  |
| ;ECOND QUARTER |  |  |  |  |  |  | 99 |
| 3US | 102 | Beginning Typewriting | 2 | 3 | 0 | 3 |  |
| DU | 104 | Preschool Observation | 1 | 0 | 6 | 3 |  |
| DU | 231 | Creative Activities | 5 | 0 | 0 | 5 |  |
| NG | 101 | Grammar | 3 | 0 | 0 | 3 |  |
| 'SY | 116 | Child Growth and Development: Middle Childhood-Adolescence | 3 | 0 | 0 | 3 |  |
| 'SY | 102 | General Psychology | 3 | 0 | 0 | 3 |  |
|  |  |  | 17 | 3 | 6 | 20 |  |
| HIRD QUARTER |  |  |  |  |  |  |  |
| DU | 111 | Language Arts Techniques I | 5 | 0 | 0 | 5 |  |
| DU | 115 | Audiovisual and Media Instruction | 3 | 0 | 0 | 3 |  |
| NG | 102 | Composition | 3 | 0 | 0 | 3 |  |
| OC | 101 | Introduction to Sociology | 5 | 0 | 0 | 5 |  |
|  |  | **Elective | 3 | 0 | 0 | 3 |  |
|  |  |  | 19 | 0 | 0 | 19 |  |
| OURTH QUARTER |  |  |  |  |  | 5 |  |
| JU | 203 | Exceptional Child | 5 | 0 | 0 | 3 |  |
| VG | 103 | Report Writing | 4 | 0 | 0 | 4 |  |
|  |  | **Elective | $\frac{4}{12}$ | $\bigcirc$ | 0 | $\frac{4}{12}$ |  |


TOTAL QUARTER HOURS ..... 121
*If students, as a result of placement tests, are found to be deficient in math and Englist skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A; MAT 099.
**The educational associate student may select elective credits from the list of recommended electives or from other related courses and make course substitutions fror appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 110, 112, 134; CAT 110; ECO 102; ENG 105, 106; PHY 120; POL 102; PSY 206; SOC 103; SSC 101; COE 100; and/or any college transfer course as approved by the department chairperson. Students may elect to participate in Cooperative Education Fielc Experience: COE 101-106.

## ELECTRONIC DATA PROCESSING: BUSINESS

The Electronic Data Processing: Business curriculum provides the student with financial competence in the solution of business data processing problems using the computer. An understanding of business operations, techniques of handling data, and development of management information systems is combined with experience in computer programming through extensive laboratory work. The related skills, such as business mathematics, accounting, English, and communications are part of the curriculum to give the student the basic abilities of all well-qualified technicians.

## ELECTRONIC DATA PROCESSING: BUSINESS SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |  |
| EDP | 115 | FORTRAN | 2 | 4 | 4 |  |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |  |
| ENG | 101 | Grammar | 3 | 0 | 3 |  |
|  | **Business Elective |  | 3 | 0 | 3 |  |
|  |  |  | 16 | 4 | 18 |  |
| SECOND QUARTER |  |  |  |  |  |  |
| ACT | 150 | Principles of Accounting | 3 | 2 | 4 |  |
| BUS | 166 | Business Law I | 3 | 0 | 3 |  |
| EDP | 223 | Introduction to RPG II | 2 | 4 | 4 |  |
| ENG | 102 | Composition | 3 | 0 | 3 |  |
|  | **Business or Social Science Elective |  | 3 | 0 | 3 | 101 |
|  |  |  | 14 | 6 | 17 |  |
| THIRD QUARTER |  |  |  |  |  |  |
| ACT | 151 | Principles of Accounting | 3 | 2 | 4 |  |
| EDP | 118 | COBOLI | 2 | 4 | 4 |  |
| EDP | 224 | RPG II | 2 | 4 | 4 |  |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |  |
|  | **Business or Social Science Elective |  | 3 | 0 | 3 |  |
|  |  |  | 13 | 10 | 18 |  |
| FOURTH QUARTER ${ }_{3}$ |  |  |  |  |  |  |
| ACT | 152 | Principles of Accounting | 3 | 2 | 4 |  |
| EDP | 214 | Computer Systems I | 2 | 2 | 3 |  |
| EDP | 119 | COBOL II | 2 | 0 | 5 |  |
| MAT | 111 | Computer Mathematics | 12 | 8 | $\frac{5}{16}$ |  |
| FIFTH QUARTER |  |  |  |  |  |  |
| BUS | 225 | Cost Accounting | 3 | 0 | 3 |  |
| BUS | 235 | Business Management | 3 | 4 | 4 |  |
| EDP | 211 | Applications I | 2 | 4 | 4 3 |  |
| ENG | 206 | Business Communications | 3 | 0 | 3 |  |
|  |  | **Business or Social Science Elective | $\frac{3}{14}$ | $\frac{0}{6}$ | $\frac{3}{17}$ |  |

## SIXTH QUARTER COURSE TITLE

$\begin{array}{lll}\text { EDP } & 212 & \text { Applications II } \\ \text { EDP } & 230 & \text { Internship I } \\ \text { EDP } & 231 & \text { Internship II } \\ \text { EDP } & 232 & \text { Communications Control Programming }\end{array}$

| C | L | C |
| ---: | ---: | ---: |
| 2 | 4 | 4 |
| 0 | 10 | 5 |
| 0 | 10 | 5 |
| $\frac{2}{4}$ | $\frac{2}{26}$ | $\frac{3}{17}$ |

TOTAL QUARTER HOURS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 103
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A; MAT 099, 100 R.
**The electronic data processing student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 101, 116, 134, 150, 151, 152, 153, 222, 229, 272; COE 100, 101A, 106D; ECO 102, 104, 108; ENG 103, 105; EDP 111, 116, 117; MAT 180; PSY 102, 206; SOC 102, 103; SSC 101


## ELECTRONICS ENGINEERING TECHNOLOGY

This curriculum provides a basic background in electronic theory with practical applications for business and industry. Courses are designed to develop competent electronics technicians who may take their places as assistants to engineers or as liaison between engineers and the skilled craftsmen.

The electronics technician may start in research, design, development, production, maintenance, or sales. Possible starting positions include assistant to an engineer, engineering aide, laboratory technician, supervisor, and equipment specialist. Maintaining liaison between the engineer and the skilled craftsman may also be the responsibility of the electronics technician. Training provided in this curriculum program is similar to training received by engineers, but has less depth and is more practical in application.

## ELECTRONICS ENGINEERING TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DFT | 101 | Technical Drafting | 0 | 6 | 2 |  |
| *ENG | 101 | Grammar | 3 | 0 | 3 |  |
| ELN | 100 | Introduction to Electronics | 3 | 2 | 4 |  |
| *MAT | 101 | Algebra 1 | 5 | 0 | 5 |  |
| MEC | 112 | Machine Shop Processes | 1 | 3 | 2 |  |
|  |  |  | 12 | 11 | 16 |  |
| SECOND QUARTER |  |  |  |  |  | 3 |
| DFT | 102 | Technical Drafting | 0 | 6 | 2 |  |
| ELC | 101 | Fundamentals of Electricity I | 4 | 4 | 6 |  |
| ENG | 102 | Composition | 3 | 0 | 3 |  |
| MAT | 102 | Trigonometry | 5 | 0 | 5 |  |
| PHY | 101 | Technical Physics | 4 | 2 | 5 |  |
|  |  |  | 16 | 12 | 21 |  |
| THIRD QUARTER |  |  |  |  |  |  |
| ELC | 102 | Fundamentals of Electricity II | 5 | 4 | 3 |  |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |  |
| MAT | 103 | Algebra II | 5 | 0 | 5 |  |
| PHY | 102 | Technical Physics | 4 | 2 | 5 |  |
|  |  |  | 17 | 6 | 20 |  |
| FOURTH QUARTER |  |  |  |  |  |  |
| ELN | 101 | Electronic Instruments and Measurements | 5 | 4 | 7 |  |
| ELN | 105 | Control Devices | 5 | 0 | 5 |  |
| MAT | 104 | Calculus I | 4 | 2 | 5 |  |
| PHY | 104 | Technical Physics **Social Science Elective | 3 | 2 | 3 |  |
|  |  |  | 18 | 10 | 23 |  |



104 RECOMMENDED ELECTIVES:
ELN 218, 230, 245; ENG 105; PSY 102, 206; SOC 102, 103; SSC 101; COE 100

## ENERGY TECHNOLOGY

Since the early 1960 's predictions have been echoing an impending energy crisis resulting in electrical brownouts and shortages of gasoline, diesel fuel, and heating oil. The reality of these predictions and the skyrocketing prices of energy have given rise to the need for more technically trained energy specialists.
The Energy Technology Program is a two-year technical curriculum designed to give a technical background resulting in an associate of applied science degree. A graduate will be prepared to work with industry, contractors, and government agencies performing services related to energy utilization, production, conservation, and management. Energy technologists are capable of performing various technical functions including: conducting audits, monitoring facility operations for energy efficiency, operating and servicing energy management systems and devices, assisting engineering staff in energy utilization and management, and making energy-related recommendations including cost-benefit analysis.

## ENERGY TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH | 105 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2 | 6 | 4 |  |
| CIV | 105 | Architectural Materials and Methods I | 3 | 3 | 4 |  |
| *ENG | 101 | Grammar | 3 | 0 | 3 |  |
| EGY | 101 | Energy Technology | 2 | 2 | 3 |  |
| *MAT | 101 | Algebra 1 | 5 | 0 | 5 |  |
|  |  |  | 15 | 11 | 19 |  |
| SECOND QUARTER |  |  |  | 0 | 2 |  |
| DFT | 106 | Blueprint Reading and Technical Sketching | 2 | 0 | - 3 |  |
| ENG | 102 | Composition | 3 | 4 | 4 |  |
| ELN | 110 | Fundamentals of Electricity and Electronics | 2 | 4 | 4 |  |
| MAT | 102 | Trigonometry | 5 4 | 2 | 5 |  |
| PHY | 101 | Technical Physics | 4 | 2 | 5 |  |
|  |  |  | 16 | 6 | 19 |  |
| THIRD QUARTER |  |  | 2 | 2 | 3 |  |
| EGY | 109 | Mechanical Devices and Building Systems | 3 | 0 | 3 |  |
| ENG | 103 | Report Writing | 2 | 2 | 3 |  |
| ELN | 111 | Electronic Components and Systems | 4 | 2 | 5 |  |
| PHY | 102 | Technical Physics | 3 | 0 | 3 |  |
| PSY | 206 | Applied Psychology | $\frac{1}{14}$ | 6 | $\overline{17}$ |  |



## RECOMMENDED ELECTIVES:

ENG 105; PSY 101, 102, 206; SOC 101, 102, 103; SSC 101; COE 100

## GENERAL OFFICE TECHNOLOGY

The General Office Technology Curriculum is designed to prepare students for a variety of office-related jobs that do not require shorthand. Machine transcription is stressed and the usual skills courses such as typewriting, office machines, and word processing are supplemented with general education courses as well as other related business courses.

The graduate of the General Office Technology Curriculum will be trained for jobs such as transcribing-machine operator, file clerk, clerk-typist, accounting clerk, bookkeeper, word processor, general office worker, receptionist, sales clerk, and a variety of related jobs.

## GENERAL OFFICE TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS | 100 | Business Education Orientation | 1 | 0 | 1 |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |
| COE | 100 | Student, Career, and Society | 3 | 0 | 3 |
| *ENG | 1015 | Secretarial Grammar | 5 | 0 | 5 |
| ENG | 106 | Spelling Techniques | 3 | 0 | 3 |
|  |  |  | 14 | 3 | 15 |
| SECOND QUARTER |  |  |  |  |  |
| BUS | 103 | Intermediate Typewriting | 2 | 3 | 3 |
| BUS | 231 | Sales and Inventory Procedures | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |
| *MAT | 110 | Business Mathematics | 5 | 0 | 5 |
|  |  |  | 16 | 3 | 17 |
| THIRD QUARTER |  |  |  |  |  |
| BUS | 104 | Advanced Typewriting | 2 | 3 | 3 |
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 117 | Office Machines | 3 | 2 | 4 |
| BUS | 134 | Personal Grooming | 3 | 0 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
|  |  |  | 14 | 5 | 16 |
| FOURTH QUARTER |  |  |  |  |  |
| ACT | 150 | Principles of Accounting | 5 | 2 |  |
| BUS | 113 | Machine Transcription 1 | 5 | 0 | 5 |
| BUS | 258 | Speed Typewriting | 2 | 3 | 3 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
|  |  | **Business Elective | 3 | 0 | 3 |


| FIFTH QUARTER C |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS | 114 | Machine Transcription II | 5 | 0 | 5 |
| BUS | 216 | Office Procedures | 5 | 0 | 5 |
| ECO | 108 | Consumer Economics | 3 | 0 | 3 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  | **Business Elective | 3 | 0 | 3 |
|  |  |  | 19 | 0 | 19 |
| SIXTH QUARTER |  |  |  |  |  |
| BUS | 205 | Production Typewriting | 2 | 3 | 3 |
| BUS | 213 | Machine Transcription III | 5 | 0 | 5 |
| $\begin{aligned} & \text { BUS } \\ & \text { or } \end{aligned}$ | 215 | Office Application |  |  |  |
| COE | 101A | Cooperative Education Field Experience | 0 | 10 | 1 |
| BUS | 259 | Office Simulation | 2 | 3 | 3 |
|  |  | **Business Elective | 3 | 0 | 3 |
|  |  |  | 12 | 16 | 15 |

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG $100 \mathrm{R}-1,100 \mathrm{R}-2,100 \mathrm{R}-3,100 \mathrm{R}-4,100 \mathrm{G}, 100 \mathrm{G}-\mathrm{A}, 101,101-\mathrm{A}, 102-\mathrm{A} ;$ MAT $099,100 \mathrm{R}$.
**The general office technology student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 106, 107, 108, 206, 207 (and accompanying labs), 123, 151, 152, 166, 167, 183L, 184M, 235; ECO 150, 151; EDP 114; ENG 105; PSY 101, 102, 206; POL 102, 103; SOC 102, 103; SSC 101

## HUMAN SERVICES TECHNOLOGY

The greatest challenge in the field of human services is to help people rediscover a meaningful and productive life. Human service workers are people who like to work with people. The student learns how to deliver services to the client or help others meet their human needs. Problem-solving skills, both performance and conceptual, are learned in the classroom work and in practical experience throughout the field placement agencies. The student will grow academically, personally, and professionally.

The human services program is a two-year course of study leading to an associate of applied science degree. Graduates are qualified to take the N. C. Department of Human Resources Examination to qualify for many state positions in human service agencies and institutions. Jobs are possible in mental retardation centers, mental hospitals, mental health centers, developmental day care centers, school systems, and many other agencies.

## HUMAN SERVICES TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| *+ENG | 101 | Grammar | 3 | 0 | 3 |
| HSA | 111 | Introduction to Human Services | 3 | 3 | 4 |
| HSA | 112 | Group Processes I | 1 | 3 | 2 |
| PSY | 150 | General Psychology 1 | 3 | 0 | 3 |
| SOC | 150 | Sociology I | 5 | 0 | 5 |
|  |  |  | 15 | 6 | 17 |
| SECOND QUARTER |  |  |  |  |  |
| +ENG | 102 | Composition | 3 | 0 | 3 |
| HSA | 100 | Basic Health Science | 3 | 0 | 3 |
| HSA | 112P | Practicum I | 1 | 6 | 3 |
| HSA | 113 | Group Processes II | 1 | 3 | 2 |
| HSA | 220 | Activities in Human Services | 2 | 2 | 3 |
| PSY | 211 | Behavior Disorders | 5 | 0 | 5 |
|  |  |  | 15 | 11 | 19 |
| THIRD QUARTER |  |  |  |  |  |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| HSA | 113P | Practicum II | 1 | 6 | 4 |
| HSA | 114 | Interviewing and Counseling | 3 | 2 | 4 |
| PSY | 120 | Human Growth and Development | 5 | 0 | 5 |
| PSY | 222 | Exceptionality | 5 | 0 | 5 |
|  |  |  | 15 | 8 | 18 |
| FOURTH QUARTER |  |  |  | 39 | 14 |
| HSA | 115 | Field Internship | 1 | 39 | 14 |


| FIFTH QUARTER COURSE TITLE |  |  | C | 1 | Cr |
| :---: | :---: | :---: | :---: | :---: | :---: |
| +ENG | 204 | Oral Communications | 3 | 0 |  |
| MHA | 211P | Practicum IV | 1 | 6 |  |
| PSY | 151 | General Psychology II | 3 | 0 |  |
| PSY | 230 | Psychology and Physiology of Aging | 3 | 0 |  |
| SOC | 160 | Courtship and Marriage | 5 | 0 |  |
| **+Elective |  |  |  |  | 1. |
|  |  |  | 15 | 6 | 18-21 |
| SIXTH QUARTER |  |  |  |  |  |
| MHA | 201 | Mental Health Care | 4 | 3 |  |
| MHA | 215P | Practicum V | 1 | 6 |  |
| PSY | 221 | Learning and Behavior | 3 | 4 |  |
| PSY | 225 | Tests and Measurements | 3 | 0 |  |
| **+Elective |  |  |  |  | $1-$ |
|  |  |  | 11 | 13 | 17-1 |
| SEVENTH QUARTER |  |  |  |  |  |
| MHA | 209 | Treatment Modalities | 2 | 4 |  |
| MHA |  | Group Processes III | 1 | 3 |  |
| MHA | 215 | Mental Health Seminar | 2 | 2 |  |
| MHA | 225 | Crisis Intervention | 3 | 0 |  |
| **+Elective |  |  |  |  | 1-3 |
|  |  |  | 8 | 9 | 13-15 |
| TOTAL QUARTER HOURS . ................................................. . . 116-122 |  |  |  |  |  |
| *If students, as a result of placement tests, are found to be deficient in English skills, the) will be required to take the appropriate courses from the following list: |  |  |  |  |  |
| ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A. |  |  |  |  |  |
| +College transfer courses may be substituted. |  |  |  |  |  |
| **The human services associate/mental health associate student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upor approval by the student's department chairperson. |  |  |  |  |  |

## RECOMMENDED ELECTIVES:

BUS 102; EDU 203, 204, 231; ENG 105; MHA 131, 132, 133, 208, 210P, 213, 231, 232, 233 college transfer courses; COE 100. Students may elect to participate in cooperative education field experience: COE 101-106. (Cooperative Education courses do no qualify for veterans' benefits.)

## INDUSTRIAL MAINTENANCE TECHNOLOGY

The Industrial Maintenance Technology curriculum is designed to educate students in technical areas in which there is a need for trained and skilled people. This program is designed to prepare graduates for employment as industrial maintenance technologists. Training in theory and practical skills will provide the knowledge needed to inspect, diagnose, repair, and install industrial, electrical, and mechanical equipment. Special emphasis will be in using hand tools and metal working machines and in checking the work with measuring and testing instruments. The Industrial Maintenance Technology curriculum is flexible in that courses in major fields may be supplemented by a wide selection of courses in related curricula such as welding, machine shop, hydraulics and pneumatics, metallurgy, and electricity.

## INDUSTRIAL MAINTENANCE TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |
| :--- | :--- | :--- | :--- | :--- |
| ELC | 112 | Alternating and Direct Current | 2 | 6 |
| 4 |  |  |  |  |
| MAT | 100 | Review of Fundamental Mathematics | $\frac{5}{7}$ | $\frac{0}{6}$ |
|  |  | $\frac{5}{9}$ |  |  |

## SECOND QUARTER

ELC 113 Alternating Current and Direct Current Machines and Controls

| PHY | 120 | Introduction to the Metric System |
| :--- | :--- | :--- |
| WLD | 120 | Oxyacetylene Welding |


| 2 | 6 | 4 |  |
| :---: | :---: | :---: | :---: |
| 3 | 0 | 3 |  |
| 2 | $\frac{3}{7}$ | $\frac{3}{10}$ | 111 |

## THIRD QUARTER

| ELC | 119 | Industrial Electrical Controls and Systems | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| *ENG | 101 | Grammar | 3 | 0 | 3 |
| ISC | 102 | Industrial Safety | $\frac{3}{8}$ | $\frac{0}{6}$ | $\frac{3}{10}$ |


| FOURTH QUARTER |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ELC | 121 | Electrical Trouble Shooting | 2 | 3 | 3 |
| WLD | 121 | Arc Welding | $\underline{2}$ | 6 | 4 |
|  |  |  | 4 | 9 | 7 |
| FIFTH QUARTER |  |  |  |  |  |
| DFT | 104 | Blueprint Reading: Mechanical | 3 | 0 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MEC | 101 | Machine Processes | 3 | 3 |  |


| SIXTH QUARTER COURSE TITLE |  |  | C | 1 | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DFT | 105 | Blueprint Reading and Sketching | 3 | 0 | 3 |
| ISC |  | Industrial Organization and Management | 3 | 0 | 3 |
| MEC | 102 | Machine Processes | 3 | 3 | 4 |
|  |  |  | 9 | 3 | 10 |
| SEVENTH QUARTER |  |  |  |  |  |
| AHR | 101 | Air Conditioning and Refrigeration | 3 | 3 | 4 |
| MEC | 210 | Physical Metallurgy | 3 | 3 | 4 |
|  |  |  | 6 | 6 | 8 |
| EIGHTH QUARTER |  |  |  |  |  |
| MEC | 114 | Shop Practice | 1 | 6 | 3 |
| MEC | 222 | Rigging and Material Handling | 2 | 3 | 3 |
|  |  |  | 3 | 9 | 6 |
| NINTH QUARTER |  |  |  |  |  |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| WLD | 122 | Commercial and Industrial Practice | 2 | 3 | 3 |
|  |  | **Elective | 3 | 0 | 3 |
|  |  |  | 8 | 3 | 9 |
| TENTH QUARTER |  |  |  |  |  |
| ISC | 205 | Maintenance Management | 3 | 0 | 3 |
| MEC | 235 | Hydraulics and Pneumatics | 3 | 3 | 4 |
|  | 206 | Applied Psychology | 3 | 0 | 3 |
|  |  |  | 9 | 3 | 10 |
| ELEVENTH QUARTER |  |  |  |  |  |
| ISC | 202 | Quality Control | 3 | 0 | 3 |
| MEC | 298 | Maintenance Problems I | 2 | 3 | 3 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 8 | 3 | 9 |
| TWELFTH QUARTER |  |  |  |  |  |
| AHR | 201 | Principles of Heating | 3 | 3 | 4 |
| MEC | 299 | Maintenance Problems II | 2 | 3 | 3 |
|  |  | **Social Science Elective | 3 | 0 | 3 |
|  |  |  | 8 | 6 | 10 |
| TOTAL QUARTER HOURS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 108 |  |  |  |  |  |
| *If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list: |  |  |  |  |  |
| ENG 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A, MAT 099, 100R. |  |  |  |  |  |
| **The industrial maintenance student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson. |  |  |  |  |  |

## RECOMMENDED ELECTIVES:

DFT 101; EDP 114; ENG 105; ISC 110, 120, 130, 140, 150, 160, 209, 231; MAT 101; PSC 102; PSY 101, 102, 104, 120, 217, 228; SOC 101, 102, 103, 104; SSC 101; COE 100

## INDUSTRIAL MANAGEMENT TECHNOLOGY

Industry's needs in positions of supervision and mid-management have grown extensively with the development of new methods of manufacturing and with the increase in the national economy. This need has added emphasis to the necessity for well-trained individuals who can understand new methods and keep abreast of trends in the economy. The supervisor and persons in mid-management must be concerned daily with human behavior and the psychological factors which affect personnel working under their direction. They must also be conscious of the responsibilities of their position toward the total economic well being of the industry.
The program is prepared to develop the individual's abilities in the art of communicating with fellow workers by providing training in business and industrial management, psychology, production methods, and general education and social education that broaden perspective. This training should provide one with the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities of supervisory and mid-management positions in industry.
The curriculum is designed for presently employed persons who wish to attend courses and work toward a degree in the evening. On-thejob training is a desirable and recommended part of the program.

The supervisor coordinates the activities of workers in one or more occupations. Duties may encompass interpreting company policies to workers, planning production schedules, estimating time required for job completion, adjusting work problems and motivating workers to achieve work goals.

## INDUSTRIAL MANAGEMENT TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | 1 | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EDP | 114 | Introduction to Computer Concepts | 3 | 0 | 3 |
| *ENG | 101 | Grammar | 3 | 0 | 3 |
| ISC | 110 | Readings in Industrial Management | 1 | 0 | 1 |
| *MAT | 101 | Algebra 1 | 5 | 0 | 5 |
|  |  |  | 12 | 0 | 12 |
| SECOND QUARTER |  |  |  |  |  |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ISC | 120 | Readings in Industrial Management | 1 | 0 | 1 |
| ISC | 231 | Manufacturing Processes | 5 | 0 | 5 |
| PHY | 120 | Introduction to the Metric System | 3 | 0 | 3 |
|  |  |  | 12 | 0 | 12 |


| THIRD QUARTER COURSE TITLE | C | L | CH |  |
| :--- | :--- | :--- | :--- | :--- |
| BUS | 128 | Basic Accounting I | 3 | 0 |
| 3 |  |  |  |  |
| ENG | 103 | Report Writing | 3 | 0 |
| ISC | 102 | Industrial Safety | 3 | 0 |
| ISC | 203 | Motion Economy | $\frac{3}{12}$ | $\frac{0}{0}$ |
|  |  |  | $\frac{3}{12}$ |  |

## FOURTH QUARTER

| BUS | 129 | Basic Accounting II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| ISC | 202 | Quality Control | 3 | 0 | 3 |
| ISC | 204 | Value Analysis | $\frac{3}{12}$ | $\underline{0}$ | $\frac{3}{0}$ |
|  |  |  |  |  |  |

## FIFTH QUARTER

| BUS | 123 | Business Finance | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 166 | Business Law I | 3 | 0 | 3 |
| ECO | 150 | Economics I | 3 | 0 | 3 |
| SOC | 103 | Social Problems | $\frac{3}{12}$ | $\underline{0}$ | $\frac{3}{2}$ |
|  |  |  |  |  |  |


| SIXTH QUARTER |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| BUS | 229 | Taxes | 3 | 2 | 4 |  |  |  |  |
| ECO | 151 | Economics II | 3 | 0 | 3 |  |  |  |  |
| ISC | 130 | Readings in Industrial Management | 1 | 0 | 1 |  |  |  |  |
| ISC | 213 | Production Planning | $\frac{4}{11}$ | $\frac{0}{2}$ | $\frac{4}{12}$ |  |  |  |  |

## SEVENTH QUARTER

| BUS | 235 | Business Management | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 239 | Marketing | 5 | 0 | 5 |
| ISC | 209 | Plant Layout | $\frac{4}{12}$ | $\frac{0}{0}$ | $\frac{4}{12}$ |

## EIGHTH QUARTER

| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DFT | 101 | Technical Drafting | 1 | 3 | 2 |
| ISC | 232 | Labor Relations | 4 | 0 | 4 |
| PSY | 206 | Applied Psychology | $\frac{3}{11}$ | $\frac{0}{3}$ | $\frac{3}{12}$ |

TOTAL QUARTER HOURS ..... 96
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 099, 100R, 100.
The industrial management technology student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

Cooperative Education credits may substitute for social science and reading courses on a credit-for-credit basis up to nine hours maximum.

## MEDICAL SECRETARY: MACHINE TRANSCRIPTION OPTION

The purposes of the Medical Secretarial curriculum are to prepare the individual to enter the medical secretarial profession through work in a doctor's office in city, county, state or government offices; provide an educational program for individuals wanting education for upgrading (moving from one medical position to another) or retraining (moving from present position to medical secretarial 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 medical typewriting, machine transcription, and machines operation. Through these skills, the individual will be able to perform medical, office-related activities and through the development of personal competencies and qualities will be provided the opportunity to enter the medical secretarial profession.

## MEDICAL SECRETARY: MACHINE TRANSCRIPTION OPTION SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | I | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIO | 101 | Basic Life Sciences | 4 | 2 | 5 |  |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |  |
| *ENG | 101S | Secretarial Grammar | 5 | 0 | 5 |  |
| *MAT | 110 | Business Mathematics | 5 | 0 | 5 |  |
|  |  |  | 16 | 5 | 18 |  |
| SECOND QUARTER |  |  |  |  |  |  |
| ACT | 150 | Principles of Accounting | 3 | 2 | 4 |  |
| BUS | 103 | Intermediate Typewriting | 2 | 3 | 3 |  |
| BUS | 117 | Office Machines | 3 | 2 | 4 |  |
| BUS | 184 M | Terminology and Vocabulary: Medical I | 3 | 0 | 3 |  |
| ENG | 106 | Spelling Techniques | 3 | 0 | 3 |  |
|  |  |  | 14 | 7 | 17 |  |
| THIRD QUARTER 3 |  |  |  |  |  |  |
| BUS | 104 | Advanced Typewriting | 2 | 3 | 5 |  |
| BUS | 113 | Machine Transcription I | 5 | 0 | 5 |  |
| BUS | 185M | Terminology and Vocabulary: Medical II | 3 | 0 | 3 |  |
| BUS | 112 | Filing | 3 | 0 | 3 |  |
| ENG | 102 | Composition | 3 | 0 | 3 |  |
|  |  |  | 16 | 3 | 17 |  |
| FOURTH QUARTER 3 |  |  |  |  |  |  |
| BUS | 134 | Personal Grooming | 3 | 0 | 5 |  |
| BUS | 188 | Medical Transcription I | 4 | 0 | 3 |  |
| BUS | 186M | Terminology and Vocabulary: Medical III | 3 | 3 | 3 |  |
| BUS | 258 | Speed Typewriting | 2 | 0 | 3 |  |
| ENG | 206 | Business Communications | 3 | - | 3 |  |
|  |  |  | 15 | 5 | 17 |  |

FIFTH QUARTER COURSE TITLE

| BUS | 216 | Office Procedures |
| :--- | :--- | :--- |
| BUS | 183 M | Medical Typing Practice |
| BUS | 189 | Medical Transcription II |
| BUS | 191 | Electronic Keyboarding |
| PSY | 104 | Human Relations |

## SIXTH QUARTER

BUS 115M Medical Ethics and Law
BUS 192 Word Processing Applications
BUS 214A Clinical Experience
$018 \quad 6$
$\begin{array}{cccccc}\text { Or } & & & 2 & 0 & 20\end{array}$
BUS 214B Medical Transcriber Seminar

| 2 | 0 | $\frac{2}{7}$ |
| :--- | :--- | :--- |
| $21-23$ | $10-14$ |  |

## TOTAL QUARTER HOURS

98 or 102
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G-A, 101, 101-A, 102-A; MAT 099, 100R.
The medical secretary student may make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.


## MEDICAL SECRETARY: SHORTHAND OPTION

The purposes of the Medical Secretarial curriculum are to prepare the individual to enter the medical secretarial profession through work in a doctor's office in city, county, state or government offices; provide an educational program for individuals wanting education for upgrading (moving from one medical position to another) or retraining (moving from present position to medical secretarial position); and provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These people will be fulfilled through skill development in the areas of medical typewriting, shorthand and machine transcription, and machines operation. Through these skills, the individual will be able to perform medical, office-related activities and through the development of personal competencies and qualities will be provided the opportunity to enter the medical secretarial profession.

## MEDICAL SECRETARY: SHORTHAND OPTION SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BIO | 101 | Basic Life Sciences | 4 | 2 | 5 |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |
| *ENG | 1015 | Secretarial Grammar | 5 | 0 | 5 |
| *MAT | 110 | Business Mathematics | 5 | 0 | 5 |
|  |  |  | 16 | 5 | 18 |

## SECOND QUARTER

| PSY | 104 | Human Relations | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 103 | Intermediate Typewriting | 2 | 3 | 3 |
| BUS | 106 | Beginning Shorthand | 5 | 0 | 5 |
| BUS | $106 A$ | Beginning Shorthand Lab | 0 | 5 | 0 |
| BUS | 117 | Office Machines | 3 | 2 | 4 |
| BUS | 184 M | Terminology and Vocabulary: Medical I | $\frac{3}{16}$ | $\frac{0}{10}$ | $\frac{3}{18}$ |

## THIRD QUARTER

| BUS | 104 | Advanced Typewriting | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 107 | Intermediate Shorthand | 5 | 0 | 5 |
| BUS | 107A | Intermediate Shorthand Lab | 0 | 5 | 0 |
| BUS | 113 | Machine Transcription I | 5 | 0 | 5 |
| BUS | 185M | Terminology and Vocabulary: Medical II | 3 | 0 | 3 |
| ENG | 102 | Composition | $\frac{3}{18}$ | $\underline{0}$ | $\frac{3}{8}$ |
|  |  |  | 19 |  |  |


| FOURTH QUARTER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 108 | Dictation and Transcription | 5 | 0 | 5 |
| BUS | 108 A | Dictation and Transcription Lab | 0 | 5 | 0 |
| BUS | 188 | Medical Transcription I | 4 | 2 | 5 |
| BUS | 186 M | Terminology and Vocabulary: Medical III | 3 | 0 | 3 |
| BUS | 258 | Speed Typewriting | 2 | 3 | 3 |
| ENG | 206 | Business Communications | $\mathbf{3}$ | $\underline{0}$ | $\frac{3}{17}$ |
|  |  |  | $\mathbf{1 7}$ | $\mathbf{1 0}$ |  |


| FIFTH QUARTER COURSE TITLE |  |  | C | L | CH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACT | 150 | Principles of Accounting | 3 | 2 | 4 |
| BUS | 216 | Office Procedures | 5 | 0 | 5 |
| BUS | 189 | Medical Transcription II | 4 | 2 | 5 |
| BUS | 191 | Electronic Keyboarding | 2 | 3 | 3 |
|  |  |  | 14 | 7 | 17 |
| SIXTH QUARTER |  |  |  |  |  |
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 115M | Medical Ethics and Law | 3 | 0 | 3 |
| BUS | 192 | Word Processing Applications | 2 | 3 | 3 |
| $\begin{aligned} & \text { BUS } \\ & \text { or } \end{aligned}$ | 214A | Clinical Experience | 0 | 18 | 6 |
| COE | 101B | Cooperative Education Field Experience | 0 | 20 | 2 |
| BUS | 214B | Medical Transcriber Seminar | 2 | 0 | 2 |
|  |  |  | 10 | 1-23 | 3-17 |

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G-A, 101, 101-A, 102-A; MAT 099, 100R.
The medical secretary student may make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.


## PARALEGAL TECHNOLOGY

The increased need for legal services in all aspects of law has placed a heavy demand on attorneys' time. In response to this situation, a special committee of the American Bar Association has recommended the use of paralegals to relieve the lawyers of many routine legal matters.

Paralegals are highly trained men and women who occupy an important position in the legal profession. Neither legal secretaries nor practicing attorneys, they are trained specialists who have studied legal procedure and can apply their knowledge as important members of the legal service team. Paralegal graduates will be able to assist the attorney in many facets of law, including work on probate matters, conducting investigations, documents, bookkeeping, library research, and providing office management. In no case will the paralegal give legal advice, enter into courtroom procedure, or be involved in litigation.

Pitt Community College has been approved to offer the paralegal program by the North Carolina State Bar, the Third Judicial District Bar, and the Pitt County Bar. Its curriculum developed in conjunction with an advisory board of prominent practicing attorneys offers a balanced course of study in law, accounting, management, and investigation. These courses will provide both the theoretical knowledge and practical skills necessary for a career as a paralegal.

## Evening Program

In addition to the regular day curriculum program, the paralegal degree program is offered during the evening in order that working secretaries and other interested persons might obtain a degree or upgrade their skills in the paralegal area.
In recognition that persons attending the evening program usually have to divide their time between their job, family, social responsibilities, and school, evening students will take approximately one-half of a full-time day student's load. With this reduction in load, evening students should expect to take between three and four years to complete the degree requirements.

## PARALEGAL CURRICULUM SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | CH |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |
| **CJC | 101 | Introduction to Criminal Justice | 5 | 0 | 5 |
| CJC | 112 | Motor Vehicle Laws | 3 | 0 | 3 |
| CJC | 115 | Criminal Law I | 3 | 0 | 3 |
| HEA | 110 | First Aid and Medical Terminology | 2 | 2 | 3 |
| PSY | 102 | General Psychology | $\frac{3}{18}$ | $\underline{0}$ | $\frac{3}{2}$ |

## SECOND QUARTER

| CJC | 109 | Interviewing | 3 | 0 | 3 |
| :---: | :---: | :--- | :--- | :--- | :--- |
| CJC | 116 | Criminal Law II | 3 | 0 | 3 |
| CJC | 120 | Principles of Organization | 3 | 0 | 3 |
| *ENG | 101 | Grammar | 3 | 0 | 3 |
| *MAT | 101 | Algebra I | 5 | 0 | 5 |
| POL | 102 | National Government | $\frac{3}{20}$ | $\underline{0}$ | $\frac{3}{0}$ |

## THIRD QUARTER

| CJC | 102 | Legal Research I |
| :--- | :--- | :--- |
| CJC | 113 | Corrections Law |
| CJC | 125 | Criminal Procedure |
| ENG | 102 | Composition |
| ENG | 204 | Oral Communications |
| POL | 103 | State and Local Government |

## FOURTH QUARTER

| CHM | 101 | Chemistry | 4 | 2 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| LEC | 203 | Legal Research II | 3 | 0 | 3 |
| LEC | 220 | Family Law | 3 | 0 | 3 |
| LEC | 224 | Torts | $\frac{3}{16}$ | $\underline{0}$ | $\frac{3}{2}$ |

## FIFTH QUARTER

| ACT | 150 | Principles of Accounting | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CJC | 205 | Evidence | 3 | 0 | 3 |
| CJC | 211 | Criminalistics | 4 | 2 | 5 |
| LEC | 207 | Law Office Management | 3 | 0 | 3 |
| LEC | 210 | Real Property and Title Abstracting I | $\underline{2}$ | $\underline{2}$ | $\frac{3}{15}$ |
|  |  |  | $\mathbf{6}$ | $\mathbf{1 8}$ |  |

## SIXTH QUARTER

| BUS | 166 | Business Law I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CJC | 204 | Evidence Photography | 3 | 3 | 4 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| LEC | 211 | Real Property and Title Abstracting II | 2 | 2 | 3 |
| LEC | 232 | Estate Administration | 3 | 0 | 3 |
| LEC | 240 | Litigation Preparation | $\frac{3}{17}$ | $\underline{0}$ | $\frac{3}{5}$ |
|  |  |  |  |  | 19 |


| SEVENTH QUARTER COURSE TITLE |  | C | L | CH |
| :--- | :--- | :--- | ---: | ---: |
| BUS | 167 | Business Law II | 3 | 0 |
| CJC | 210 | Criminal Investigation | 4 | 2 |
| CJC | 235 | Forensic Science | 3 | 2 |
| LEC | 212 | Real Estate Transactions | 2 | 2 |
| LEC | 229 | Taxes | $\frac{3}{15}$ | $\frac{0}{6}$ |
|  |  | $\frac{3}{18}$ |  |  |

## TOTAL QUARTER HOURS <br> 130

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 100R-1, 100R-2, 100R-3, 100G, 100G-A, 101-A, 102-A; MAT 099, 100R, 100.
The Paralegal student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVE:

LEC 250
*CJC 151, 152, 154, 155, 156 may be substituted for CJC 101 Introduction to Criminal Justice, which is a 5 credit-hour course.


## RADIOLOGIC TECHNOLOGY

This curriculum is designed to meet the ever-increasing need for technologists in the rapidly growing branch of medicine known as radiology. The aim of the Radiologic Technology Program is to prepare qualified persons for positions in the area of radiologic technology and to prepare them for furthering their education, if they wish, in nuclear medicine, radiation therapy, other imaging modalities, or a baccalaureate program.

Students are selected on the basis of demonstrated aptitude for radiology, as determined by entrance tests, interviews with faculty members, high school records, character references, and physical examinations. Graduates of accredited programs are eligible for examination by the American Registry of Radiologic Technologists. After passing the examination, they are certified as registered technologists in x-ray technology and entitled to use the legal title Registered Technologist (R.T.). They are then eligible for membership in the American Society of Radiologic Technologists, an organization dedicated to maintaining high educational standards of training and professional stature.
Radiologic technologists work in hospitals, clinics, doctor's offices, public health institutions, and industrial medical clinics. They assist radiologists in the use of x-rays to examine for broken bones, ulcers, tumors, and disease or malfunctions of various organs.

The radiologic technologists take $x$-ray films called radiographs. They adjust radiographic equipment to the correct settings for a specific examination and position the patient and make, develop, and file the required number of radiographs.
X-ray technologists also aid the physician in administering chemical mixtures to the patient to make certain organs show up clearly in $x$-ray examinations. Technologists may need to use mobile $x$-ray equipment at a patient's bedside and in surgery.

## RADIOLOGIC TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST | QUARTER $\quad$ COURSE TITLE | C | L | CL | CH |
| :--- | :--- | ---: | ---: | ---: | ---: |
| ENG | 101 | Grammar | 3 | 0 | 0 |
| MAT | 101 | Algebra I | 5 | 0 | 0 |
| SOC | 102 H | Principles of Sociology | 5 |  |  |
|  |  | (Health Professions) |  |  |  |
| BIO | 107 | Anatomy and Physiology I | 4 | 0 | 0 |
| RDT | 101 | Radiologic Technology I | 4 | 2 | 0 |
| PHY | 107 | Radiologic Physics | 0 | 5 |  |
| RDT | 111 | Clinical Education | 3 | 3 | 0 |

## SECOND QUARTER COURSE TITLE

ENG 102 Composition

| $\mathbf{C}$ | $\mathbf{L}$ | $\mathbf{C L}$ | $\mathbf{C H}$ |
| ---: | ---: | ---: | ---: |
| 3 | 0 | 0 | 3 |
| 3 | 0 | 0 | 3 |
| 4 | 2 | 0 | 5 |
| 4 | 3 | 0 | 5 |
| 1 | 0 | 15 | 6 |
| 2 | 2 | 0 | 3 |
| 17 | 7 | 15 | 25 |

## THIRD QUARTER

ENG 103 Report Writing
RDT 103 Radiologic Technology III
BUS 272 Principles of Supervision
RDT 201 Topographic Anatomy
RDT 113 Clinical Education

| 3 | 0 | 0 | 3 |
| ---: | ---: | ---: | ---: |
| 4 | 2 | 0 | 5 |
| 3 | 0 | 0 | 3 |
| 2 | 0 | 0 | 2 |
| 1 | 0 | 24 | 9 |
| 13 | 2 | 24 | 22 |

## FOURTH QUARTER

| RDT | 204 | Radiologic Technology IV |
| :--- | :--- | :--- |
| RDT | 114 | Clinical Education |

## FIFTH QUARTER

| RDT 215 Clinical Education | 1 | 0 | 39 | 14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## SIXTH QUARTER

| BUS | 166 | Business Law |
| :--- | :--- | :--- |
| BIO | 208 | Pathology |
| RDT | 205 | Radiologic Technology V |
| RDT | 216 | Clinical Education |
| PSY | 102 | General Psychology |

## SEVENTH QUARTER

| RDT | 206 | Radiologic Technology VI |
| :--- | :--- | :--- |
| RDT | 217 | Clinical Education |

## EIGHTH QUARTER

| RDT | 208 | Radiologic Technology VII |
| :--- | :--- | :--- |
| RDT | 218 | Clinical Education |

TOTAL QUARTER HOURS ..... 165

The Radiologic Technology student may select elective credits from approved courses, and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## SECRETARIAL SCIENCE

The Secretarial Science curriculum is designed to offer students secretarial skills in typing, dictation, transcription, and terminology for employment in the business world. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, and personality development.

The graduate of the Secretarial Science curriculum should have a knowledge of business terminology, skill in dictation, and skill in transcription of business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility including meeting office callers, screening telephone calls, and assisting an executive. The graduate may enter a secretarial position in a variety of businesses such as insurance companies, banks, marketing institutions, and financial firms.

## SECRETARIAL SCIENCE SUGGESTED CURRICULUM BY QUARTERS

|  | FIRST QUARTER COURSE TITLE |  |  | C | 1 | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | BUS | 100 | Business Education Orientation | 1 | 0 | 1 |
|  | *ENG | 1015 | Secretarial Grammar | 5 | 0 | 5 |
|  | BUS | 102 | Beginning Typewriting | 2 | 3 | 3 |
| 124 | COE | 100 | Student Career and Society | 3 | 0 | 3 |
|  | ENG | 106 | Spelling Techniques | 3 | 0 | 3 |
|  | BUS | 134 | Personal Grooming | 3 | 0 | 3 |
|  |  |  |  | 17 | 3 | 18 |
|  | SECO | ND Q | RTER |  |  |  |
|  | ENG | 102 | Composition | 3 | 0 | 3 |
|  | BUS | 103 | Intermediate Typewriting | 2 | 3 | 3 |
|  | *MAT | 110 | Business Mathematics | 5 | 0 | 5 |
|  | BUS | 106 | Beginning Shorthand | 5 | 0 | 5 |
|  | BUS | 106A | Shorthand Lab | 0 | 5 | 0 |
|  | BUS | 113 | Machine Transcription I | 5 | 0 | 5 |
|  |  |  |  | 20 | 8 | 21 |

## THIRD QUARTER

| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 104 | Advanced Typewriting | 2 | 3 | 3 |
| BUS | 107 | Intermediate Shorthand | 5 | 0 | 5 |
| BUS | $107 A$ | Shorthand Lab | 0 | 5 | 0 |
| BUS | 114 | Machine Transcription II | 5 | 0 | 5 |
| BUS | 117 | Office Machines | $\frac{3}{18}$ | $\frac{2}{10}$ | $\frac{4}{20}$ |


| FOURTH QUARTER COURSE TITLE |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| ENG | 206 | Business Communications |  |  |
| BUS | 108 | Advanced Shorthand |  |  |
| BUS | $108 A$ | Shorthand Lab | C | L |
| ACT | 150 | Principles of Accounting | 3 | 0 |
| BUS | 258 | Speed Typewriting |  |  |
| ECO | 108 | Consumer Economics | 5 | 0 |

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG $100 \mathrm{R}-1,100 \mathrm{R}-2,100 \mathrm{R}-3,100 \mathrm{R}-4,100 \mathrm{G}, 100 \mathrm{G}-\mathrm{A}, 101,101-\mathrm{A}, 102-\mathrm{A} ;$ MAT $099,100 \mathrm{R}$.
*The secretarial science student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS $123,151,152,153,160,161,162,163,164,166,167,183 \mathrm{~L}, 183 \mathrm{M}, 191,192,213,229,231$, 235; ECO 150, 151; EDP 114; ENG 105; PSY 102, 103, 206; SSC 101
$126$


## AIR CONDITIONING, HEATING, AND REFRIGERATION

The Air Conditioning, Heating, and Refrigeration curriculum is designed to prepare the student to assist in planning, installing, operating, and maintaining air conditioning equipment. Technical information is presented and related skills are developed to enable the graduate to function efficiently when working with engineers, systems designers, skilled craftsmen, salesmen, and others in the field. Considerable emphasis is placed on self-development in an effort to encourage the graduate to continue to study and grow as the industry advances.

Air Conditioning, Heating, and Refrigeration technicians may be employed in areas of sales, installation, maintenance, production drafting, systems design, or research engineering (assistant). They work with equipment for regulating temperature and humidity and with control systems, ducts, and piping for distribution of air, water, steam, and refrigerants.

## AIR CONDITIONING, HEATING, AND REFRIGERATION SUGGESTED CURRICULUM BY QUARTERS



FOURTH QUARTER COURSE TITLE

| AHR | 1124 | $\begin{array}{c}\text { Air Conditioning, Heating, and } \\ \text { Refrigeration Servicing }\end{array}$ |
| :---: | :---: | :---: |
| AHR | 1126 | All Year Comfort Systems |
| MEC | 1120 | Duct Construction and Installation |
|  | **Elective |  |

C $\quad \mathrm{L} \quad \mathrm{SH} \quad \mathrm{CH}$

| 3 | 0 | 6 | 5 |
| ---: | ---: | ---: | ---: |
| 3 | 0 | 6 | 5 |
| 3 | 0 | 6 | 5 |
| $\frac{3}{12}$ | $\frac{0}{0}$ | $\frac{0}{18}$ | $\frac{3}{18}$ |

TOTAL QUARTER HOURS ............................................................... . . 72
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
**The Air Conditioning, Heating, and Refrigeration student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson.

## RECOMMENDED ELECTIVES:

BUS 1103, 1105; ELC 1126
Students may elect to participate in Cooperative Education field experience: COE 101-106.


## AUTOMOTIVE MECHANICS

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, or adjust automotive vehicles. Manual skills are developed in practical shop work.

Automobile designs are rapidly changing as a result of differing buyer markets, rising fuel and production costs, and the passing of new state and federal regulations. To keep up with these changes, the auto mechanic must continue to update and add to his knowledge and skills in this area. The fundamentals of the diesel engine will be taught since this engine seems promising in the fight against pollution.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas, they may also service and/or inspect and test tractors and other farm vehicles or machines to determine the causes of faulty operation and repair or replace defective parts to restore the vehicles or machines to proper operating condition. They use shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. A large number of automobile mechanics specialize in particular types of repair work. For example, some may specialize in repairing only powr steering and power brakes, or repairing only automatic transmissions. Usually such specialists have a general knowledge of automotive repair and may occasionally be called upon to do other types of work.

## AUTOMOTIVE MECHANICS SUGGESTED CURRICULUM BY QUARTERS

| FIRST | QUAR | R COURSE TITLE | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |
| *MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |
| PME | 1100 | Engine Shop Practice | 0 | 0 | 3 | 1 |
| PME | 1101 | Internal Combustion Engine: Gasoline and Diesel | $\frac{5}{12}$ | $\frac{0}{0}$ | $\frac{12}{15}$ | $\frac{9}{17}$ |
| SECOND QUARTER |  |  |  |  |  |  |
| ENG | 1102 | Communication Skills | 3 | 0 | 0 | 3 |
| MEC | 1147 | Systems of Measurement and Measuring Tools | 2 | 0 | 0 | 2 |
| PHY | 1103 | Principles of Electricity | 3 | 2 | 0 | 4 |
| PME | 1102 | Electrical Systems | 5 | 0 | 12 | 9 |
|  |  |  | 13 | 2 | 12 | 18 |


| THIRD QUARTER COURSE TITLE |  |  | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PME | 1104 | Fuel Systems: Gasoline and Diesel | 5 | 0 | 9 | 8 |
| PME | 1123 | Brake, Chassis, and Suspension | 3 | 0 | 9 | 6 |
| PSY | 1101 | Human Relations | 3 | 0 | 0 | 3 |
|  |  |  | 11 | 0 | 18 | 17 |
| FOURTH QUARTER |  |  |  |  |  |  |
| AHR | 1101 | Automotive Air Conditioning | 3 | 0 | 6 | 5 |
| PME | 1124 | Power Trains | 3 | 0 | 9 | 6 |
| WLD | 1129 | Basic Gas and Electric Welding | $\underline{2}$ | 0 | 6 | 4 |
|  |  |  | 8 | 0 | 21 | 15 |
| FIFTH QUARTER |  |  |  |  |  |  |
| PME | 1125 | Auto Servicing | 3 | 0 | 9 | 6 |
| PME | 1204 | Emission Controls | 5 | 0 | 6 | 7 |
|  |  |  | 8 | 0 | 15 | 13 |
| SIXTH QUARTER |  |  |  |  |  |  |
| MEC | 1112 | Machine Shop Processes | 1 | 0 | 3 | 2 |
| PME | 1202 | Electricity/Electronics | 3 | 0 | 9 | 6 |
| PME | 1227 | Power Accessories | 2 | 0 | 6 | 4 |
|  |  |  | 6 | 0 | 18 | 12 |
| SEVENTH QUARTER |  |  |  |  |  |  |
| PME | 1224 | Automatic Transmissions | 5 | 0 | 12 | 9 |
| PME | 1230 | Auto Service Excellence Test Review | 5 | 0 | 0 | 5 |
|  |  |  | 10 | 0 | 12 | 14 |
| TOTA | L QU | TER HOURS |  |  |  | 106 |

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Automotive Mechanics student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

Students may elect to participate in Cooperative Education field experience: COE 101-106.

## CARPENTRY AND CABINETMAKING

Carpentry is one of the basic trades in the construction field. Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and power tools. The work must conform to local building codes for both residential and commercial structures.

The curriculum in carpentry is designed to train individuals to enter the trade with a background in both shop skills and related information. They must have knowledge of mathematics, blueprint reading, methods of construction, building materials, concrete form construction, rough framing, roof and stair construction, the application of interior and exterior trim, and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. Specialists may work as layout carpenters, framing carpenters, concrete form carpenters, scaffolding carpenters, accoustical and insulating carpenters, and finish carpenters.

## CARPENTRY AND CABINETMAKING SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | SH | CH |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| CAR | 1101 | Carpentry | 3 | 0 | 15 | 8 |
| DFT | 1110 | Blueprint Reading: Building Trades | 3 | 0 | 0 | 3 |
| *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |
| *MAT | 1101 | Fundamentals of Mathematics | $\frac{5}{13}$ | $\underline{0}$ | $\frac{0}{15}$ | $\frac{5}{18}$ |

## SECOND QUARTER

| CAR | 1102 | Carpentry: Millwork and Cabinetmaking |
| :--- | :--- | :--- |
| DFT | 1111 | Blueprint Reading and Sketching I |
| ENG | 1102 | Communication Skills |
| MAT | 1112 | Building Trade Mathematics |


| 3 | 0 | 15 | 8 |
| ---: | ---: | ---: | ---: |
| 3 | 0 | 0 | 3 |
| 3 | 0 | 0 | 3 |
| $\frac{3}{12}$ | $\frac{0}{0}$ | $\frac{0}{15}$ | $\frac{3}{17}$ |

THIRD QUARTER

| CAR | 1103 | Carpentry: Framing | 3 | 0 | 15 | 8 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| CAR | 1113 | Carpentry: Estimating | 3 | 0 | 3 | 4 |
| PSY | 1101 | Human Relations | $\frac{3}{9}$ | $\frac{0}{0}$ | $\frac{0}{18}$ | $\frac{3}{15}$ |

FOURTH QUARTER

| BUS | 1103 | Small Business Operations | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| CAR | 1104 | Carpentry: Finishing I | 3 | 0 | 18 | 9 |
| CAR | 1114 | Building Codes | $\frac{3}{9}$ | $\frac{0}{0}$ | $\frac{0}{18}$ | $\frac{3}{15}$ |

[^1]*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Carpentry and Cabinetmaking student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## COSMETOLOGY

Cosmetologists perform many functions in providing beauty services for customers. These services may include styling, cutting, trimming, straightening, permanent waving, coloring, tinting, bleaching, and shampooing hair and wig styling and wig care services. They sometimes do make-up analysis, suggest cosmetology aids, and advise customers regarding what products to use and how to use them with the greatest benefits.

Designed to prepare the student for employment in the field of cosmetology, the cosmetology curriculum program provides instruction and practice in manicuring, facials, massages, scalp treatments; and shampooing, permanent waving, cutting, styling, pressing, chemical relaxing, thermal waving, and curling hair; and wig care services. The Cosmetology Program is approved by the North Carolina State Board of Cosmetic Art Examiners.

State laws and regulations require the completion of a minimum of 1200 contact hours of instruction in prescribed subject matter prior to applying to the State Board of Cosmetic Art Examiners for examination. For additional information pertaining to rules and regulations governing the Cosmetology program, contact the North Carolina State Board of Cosmetic Art Examiners, Box 1108, Raleigh, North Carolina.

## COSMETOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE | C | L | SH | CH |
| :--- | :---: | :---: | :---: | :---: | :---: |
| COS 1101 Cosmetology I |  |  |  |  |
| SECOND QUARTER |  |  |  |  |
| COS 110 |  |  |  |  |
| Cosmetology II | 0 | 0 | 40 | 12 |

## ELECTRICAL INSTALLATION AND MAINTENANCE

Electrical Installation and Maintenance program provides training in the basic fundamentals and practices involved in the electrical trades. A major portion of the program is devoted to laboratory and shop instruction designed to give the student practical knowledge and experience in applying the fundamentals taught in class.

Graduates of the electrical trades program will be qualified to enter an electrical trade as on-the-job trainees or apprentices, where they will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial plants. They will have an understanding of the fundamentals of the National Electric Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. They will have a basic knowledge of motor and motor control systems; industrial electronic control systems; business procedures, organization, and practices; communicative skills; and the necessary background to be able to advance through experience and additional training.

## ELECTRICAL INSTALLATION AND MAINTENANCE SUGGESTED CURRICULUM BY QUARTERS



| FOURTH QUARTER COURSE TITLE | C | L. | SH | CH |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| BUS | 1103 | Small Business Operations | 3 | 0 | 0 | 3 |
| ELC | 1125 | Commercial and Industrial Wiring | 5 | 0 | 12 | 9 |
| ELN | 1119 | Industrial Electronics | $\frac{3}{11}$ | $\underline{0}$ | $\underline{6}$ | $\frac{5}{7}$ |

## TOTAL QUARTER HOURS

*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Electrical Installation and Maintenance student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

Students may elect to participate in Cooperative Education field experience: COE 101-106.


## ELECTRONIC SERVICING

Within recent years, rapid advances in electronics technology have created an increased need for skilled electronic service representatives. Individuals who expect to qualify as competent and up-to-date service representatives must expand their knowledge and skills to meet the job needs of the fast-growing electronics industry.

The Electronic Servicing Program provides training in the knowledge and skills required for the installation, maintenance, and servicing of electronic systems. A major portion of the time is spent in the laboratory verifying electronic principles and developing servicing techniques.

A service representative may be required to install, maintain, and service many types of electronic systems. The service representative may be employed in one or more of the following areas: electrician, radio and television servicing, broadcast technician, or as a technician in many industrial applications including manufacturing, quality control, and sales of electronic equipment. Other opportunities are available in other phases of industry depending upon the individual's interest and ability.

## ELECTRONIC SERVICING SUGGESTED CURRICULUM BY QUARTERS

| $136$ | FIRST QUARTER COURSE TITLE |  |  | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DFT | 1120 | Drafting: Electronic Servicing | 3 | 0 | 3 | 4 |
|  | ELC | 1112A | Direct Current Theory and Practice | 5 | 0 | 15 | 10 |
|  | *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |
|  | *MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |
|  |  |  |  | 15 | 0 | 18 | 21 |
| SECOND QUARTER |  |  |  |  |  |  |  |
|  | ELC | 1112B | Alternating Current Theory and Practice | 5 | 0 | 15 | 10 |
|  | ENG | 1102 | Communication Skills | 3 | 0 | 0 | 3 |
|  | MAT | 1102 | Algebra | 5 | 0 | 0 | 5 |
|  | PHY | 1101A | Applied Science | 2 | 0 | 0 | 2 |
|  |  |  |  | 15 | 0 | 15 | 20 |
| THIRD QUARTER |  |  |  |  |  |  |  |
|  | ELN | 1103 | Introduction to Control Devices | 5 | 0 | 15 | 10 |
|  | ELN | 1125 | Radio Receiver Servicing | 5 | 0 | 0 | 5 |
|  | MAT | 1103 | Basic Geometry and Trigonometry | 5 | 0 | 0 | 5 |
|  | PHY | 1101B | Applied Science | 1 | $\underline{2}$ | 0 | $\underline{2}$ |
|  |  |  |  | 16 | 2 | 15 | 22 |
| FOURTH QUARTER |  |  |  |  |  |  |  |
|  | ELN | 1127 | Television Receiver Circuits and Servicing | 10 | 0 | 18 | 16 |
|  | TOTA | L CRED | IT HOURS REQUIRED FOR'ONE-YEAR DIP | PR |  |  | 79 |

[^2]
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Electronic Servicing student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

Students may elect to participate in Cooperative Education field experience: COE 101-106.

## FARM MACHINERY MECHANICS

This curriculum is designed to provide broad training to permit entrance into the field best suited to the interest and aptitude of the graduate. Emphasis is placed on the basic theories of farm machinery mechanics and techniques of maintenance, troubleshooting, and repair of general farm machinery with specialization to be developed later in employment.

Graduates of this curriculum can quickly adapt themselves for employment in the areas of sales, service, distribution, and installations or provide the service that must be done in the field. They make inspections and tests to determine the causes of faulty operation and repair or replace defective parts to restore the tractor or other gasoline-powered equipment to proper operating condition.

## FARM MACHINERY MECHANICS SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | 1 | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |
| *MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |
| PME | 1105A | Fundamentals of Diesel Engines | 5 | 0 | 6 | 7 |
| PME | 1135 | Basic Fuel Systems: Gasoline and Diesel | 3 | 0 | 3 | 4 |
| AGR | 119 | Techniques of Welding | 2 | 0 | 3 | 3 |
|  |  |  | 17 | 0 | 12 | 21 |
| SECOND QUARTER |  |  |  |  |  |  |
| COE | 100 | Student, Career, and Society | 3 | 0 | 0 | 3 |
| ENG | 1102 | Communication Skills | 3 | 0 | 0 | 3 |
| PME | 1105B | Fundamentals of Diesel Engines | 1 | 0 | 6 | 3 |
| PME | 1137 | Basic Power Transmission | 4 | 0 | 6 | 6 |
| PME | 1050 | New Tractor and Equipment Setup | 1 | 0 | 3 | 2 |
| PME | 1126 | Small Engine Repair | 1 | 0 | 3 | 2 |
|  |  |  | 13 | 0 | 18 | 19 |
| THIRD QUARTER |  |  |  |  |  |  |
| COE | 101D | Cooperative Education Intern | 0 | 0 | 40 | 4 |
| FOURTH QUARTER |  |  |  |  |  |  |
| PME | 1010 | Air Conditioning | 2 | 0 | 3 | 3 |
| PME | 1136 | Fundamental Hydraulics | 2 | 0 | 6 | 4 |
| PME | 1030 | Electrical Systems in Farm Equipment | 3 | 0 | 3 | 4 |
| PME | 1040 | Farm Harvesting Equipment | 3 | 0 | 6 | 5 |
| PSY | 1101 | Human Relations | 3 | 0 | 0 | 3 |
|  |  |  | 13 | 0 | 18 | 19 |

TOTAL QUARTER HOURS .................................................................... 63
*If students, as a result of placement tests, are found to be deficient in math and English
skills, they will be required to take the appropriate courses from the following list:
ENG 1000; MAT 0099, 1000.
The Farm Machinery Mechanics student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## INDUSTRIAL MAINTENANCE: ELECTROMECHANICAL

This curriculum is designed to meet the need for plant maintenance workers. Existing industries in North Carolina and new industries moving into the state express the need for skilled craftsmen with the background, knowledge, and potential to advance in the plant maintenance field. This curriculum is designed to prepare the individual, through theory and practice of various maintenance skills and related courses, to obtain employment in industrial maintenance occupations.

The Industrial Maintenance: Electromechanical program is designed to prepare individuals to repair and maintain mechanical systems and equipment, plumbing, physical structure, and electrical wiring and fixtures of commercial and industrial establishments. They measure, cut, and install pipe and tubing for gas, water, and hydraulic lines using appropriate tools. They may install electrical equipment and repair or replace wiring and fixtures. They do repair work on metal structures and equipment using welding equipment. They may operate metalworking machines to repair or fabricate new parts. They may clean, lubricate, repair, and replace various machine parts including bearings, gears, pulleys, gauges, valves, and control devices.

The plant maintenance worker may start in one of the following areas: general maintenance helper, factory or mill maintenance repairer helper, and millwright helper. Advanced jobs in the field include plant maintenance worker, factory or mill maintenance repairer, millwright, powerhouse mechanic, maintenance electrician, mechanical maintenance supervisor, and utilities and maintenance supervisor.

## INDUSTRIAL MAINTENANCE: ELECTROMECHANICAL SUGGESTED CURRICULUM BY QUARTERS


*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Industrial Maintenance: Electromechanical student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

Students may elect to participate in Cooperative Education field experience: COE 101-106.

## MACHINIST

The Machinist curriculum is designed to provide training in the basic skills and related technical information necessary to gain employment and build a profitable career in the machine shop industry.

Machinists are skilled metal workers who shape metal parts by using machine tools and hand tools. Their training and experience enables them to plan and carry through all the operations needed in turning out a machined product and to switch readily from one kind of product to another. Machinists are able to select the proper tools and materials required for each job and to plan the cutting and finishing work according to blueprint or written specifications. They make standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining. They often use precision measuring instruments such as micrometers and gauges to measure to the thousandths of an inch the accuracy of their work.

These skilled machinists must be able to set up and operate most types of machine tools. They must also know the composition of metals so that they can heat and quench cutting tools and parts to improve machineability. Their wide knowledge enables them to turn a block of metal into an intricate, precise machined part.

## MACHINIST SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DFT | 1104 | Blueprint Reading: Mechanical | 3 | 0 | 0 | 3 |
| *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |
| *MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |
| MEC | 1101 | Machine Shop Theory and Practice | 3 | 0 | 12 | 7 |
| ISC | 1101 | Industrial Safety | 3 | 0 | 0 | 3 |
|  |  |  | 16 | 0 | 12 | 20 |
| SECOND QUARTER |  |  |  |  |  |  |
| DFT | 1105 | Blueprint Reading: Mechanical | 3 | 0 | 0 |  |
| ENG | 1102 | Communication Skills | 3 | 0 | 0 | 3 |
| MAT | 1102 | Algebra | 5 | 0 | 0 | 5 |
| MEC | 1102 | Machine Shop Theory and Practice | 3 | 0 | 12 | 7 |
| PHY | 1101 | Applied Science | 3 | 2 | 0 | 4 |
|  |  |  | 17 | 2 | 12 | 22 |
| THIRD QUARTER |  |  |  |  |  |  |
| DFT | 1106 | Blueprint Reading: Mechanical | 3 | 0 | 0 |  |
| MAT | 1103 | Basic Geometry and Trigonometry | 5 | 0 | 12 | 7 |
| MEC | 1103 | Machine Shop Theory and Practice | 3 | 0 | 12 | 3 |
| MEC | 1115 | Metallurgy: Ferrous Metals | 2 | 0 | 0 | 3 |
| PSY | 1101 | Human Relations | 3 | 0 | - | 31 |
|  |  |  | 16 | 3 | 12 | 21 |


| **FOURTH QUARTER COURSE TITLE | C | L | SH | CH |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| DFT | 1201 | Drafting: Mechanical I | 1 | 3 | 0 |
|  | 2 |  |  |  |  |
| MEC | 1104 | Machine Shop Theory and Practice | 3 | 0 | 12 |
| MEC | 1116 | Metallurgy: Non-Ferrous Metals | 2 | 3 | 0 |
| WLD | 1102 | Basic Gas Welding | $\frac{0}{6}$ | $\frac{0}{6}$ | $\frac{3}{15}$ |
| W | $\frac{1}{13}$ |  |  |  |  |

TOTAL QUARTER HOURS FOR STUDENTS GRADUATING AFTER FOUR QUARTERS ..... 76
**Two quarters of advanced training may be offered to outstanding students after satisfactory completion of the four quarter course of study and upon recommendation of their curriculum instructors.

| FIFTH | QUA | ER COURSE TITLE | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MAT | 1123 | Machinist Mathematics | 3 | 0 | 0 | 3 |
| MEC | 1105 | Machine Shop Theory and Practice | 3 | 0 | 15 | 8 |
| MEC | 1221 | Machine Maintenance | 2 | 0 | 3 | 3 |
|  |  |  | 8 | 0 | 18 | 14 |
| SIXT | QUA |  |  |  |  |  |
| DFT | 1202 | Drafting: Mechanical II | 1 | 3 | 0 | 2 |
| MEC | 1106 | Machine Shop Theory and Practice | 3 | 0 | 12 | 7 |
| MEC | 1107 | Jigs and Fixtures | 2 | 0 | 6 | 4 |
|  |  |  | 6 | 3 | 18 | 13 |

TOTAL QUARTER HOURS FOR STUDENTS COMPLETING SIX QUARTERS103
*If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
142
The Machinist student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## MASONRY

Masons are the artisans in the building trades who work with brick, concrete masonry units, stone and artificial stone, and other similar building materials in the construction industry. Most masons are employed by contractors in the building construction fields to lay brick and blocks made of tile, concrete, glass, gypsum, or terra cotta. Also, they construct and repair walls, partitions, arches, sewers, furnaces, and other masonry structures. Masons must have a knowledge of basic mathematics, blueprint reading, and masonry technology. They must also know the methods used in laying out a masonry job with specific reference to rigid insulation, refractories, and masonry units specified for residential, commercial, and industrial construction.

Most employment opportunities for masons are with contractors in new building construction. However, a substantial proportion of masons are self-employed or work with contractors doing repair, alteration, or modernization of existing masonry construction.

After gaining experience in the various types of the masonry trade along with leadership training, it is possible for the artisan to become a technical inspector and to eventually become a contractor.

## MASONRY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | SH | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DFT | 1110 | Blueprint Reading: Building Trades | 3 | 0 | 0 | 3 |
| MAS | 1101 | Bricklaying I | 3 | 0 | 21 | 10 |
| MAT | 1112M | Building Trades Mathematics | 3 | 0 | 0 | 3 |
|  |  |  | 9 | 0 | 21 | 16 |
| SECOND QUARTER |  |  |  |  |  |  |
| DFT | 1111 | Blueprint Reading and Sketching I | 3 | 0 | 0 | 3 |
| MAS | 1102 | Bricklaying II | 3 | 0 | 21 | 10 |
| MAT | 1113 | Building Trades Mathematics: Masonry | 3 | 0 | 0 | 3 |
|  |  |  | 9 | 0 | 21 | 16 |
| THIRD QUARTER |  |  |  |  |  |  |
| DFT | 1112 | Blueprint Reading and Sketching II | 3 | 0 | 0 21 | 3 |
| MAS | 1103 | Bricklaying III | 2 | 0 | 21 | 9 |
| MAS | 1113 | Masonry Estimating I | 1 | 0 | 3 | 2 |
|  |  |  | 6 | 0 | 24 | 14 |
| FOURTH QUARTER |  |  |  |  |  | 3 |
| DFT | 1113M | Blueprint Reading and Sketching: Masonry | 3 | 0 | 21 | 9 |
| MAS | 1104 | Bricklaying IV | 1 | 0 | 1 3 | 2 |
| MAS | 1114 | Masonry Estimating II | 6 | 0 | $\frac{3}{24}$ | $\frac{1}{14}$ |

TOTAL QUARTER HOURS
The Masonry student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## PRACTICAL NURSE EDUCATION

The Practical Nurse Education Curriculum is designed to make available to qualified persons the opportunity to prepare for participation in care of patients of all ages, in various stages of dependency, and with a variety of health conditions. Throughout the program, the student is expected to grow continuously in acquisition of knowledge and understanding related to nursing, the biological sciences, and the social sciences and in skills related to nursing practices, communications, interpersonal relations, and use of good judgment. Graduates are eligible to take a state licensing examination given by the North Carolina Board of Nursing for employment as a licensed practical nurse (LPN).

The licensed practical nurse is prepared for employment in hospitals, nursing homes, clinics, doctors' and dentists' offices, and public health agencies. In all situations the LPN functions under the supervision of a registered nurse and/or licensed physician.

Curriculum currently under revision.


## PRACTICAL NURSE EDUCATION SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER | COURSE TITLE | C | L | SH | CH |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| BIO | 101 | Basic Life Sciences | 4 | 2 | 0 | 5 |
| ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| MAT | 114 | Basic Math for Health Professions | 3 | 0 | 0 | 3 |
| NUR | 101 | Fundamentals of Nursing | 6 | 6 | 0 | 9 |
| NUT | 101 | Basic Nutrition | $\frac{3}{19}$ | $\frac{0}{8}$ | $\underline{0}$ | $\frac{3}{2}$ |

## SECOND QUARTER

| NUR | 102 | Medical-Surgical Nursing I | 8 | 0 | 15 | 13 |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| NUR | 110 | Pharmacology | 3 | 0 | 0 | 3 |
| PSY | 150 | General Psychology I | $\underline{3}$ | $\frac{0}{14}$ | $\frac{0}{15}$ | $\frac{3}{19}$ |

## THIRD QUARTER

| NUR | 103 | Medical-Surgical Nursing II | 9 | 0 | 15 |
| :--- | :--- | ---: | :--- | ---: | ---: |
| PSY | 120 | Human Growth and Development | $\frac{3}{12}$ | $\frac{0}{0}$ | $\frac{0}{15}$ |
|  |  |  |  |  |  |
|  |  | $\frac{3}{17}$ |  |  |  |
| FOURTH QUARTER |  |  |  |  |  |
| NUR | $104 \quad$ Maternal Child Health Nursing I |  |  |  |  |
| NUR | 131 | Nursing Seminar | 8 | 0 | 15 |

The Practical Nurse Education student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.

## Curriculum currently under revision.



## SURGICAL TECHNOLOGY

The twelve-month Surgical Technology Program offers students opportunities to acquire knowledge in areas of anatomy, physiology, microbiology, principles of asepsis, and preparation of the operating room for surgery. The primary objective of the program is to prepare the graduate to perform all the functions of the surgical technologist and to provide the best service possible as a member of the surgical team in the care of each patient who comes to the operating room. Graduates of the program are eligible to write the certifying examination given by the Association of Surgical Technologists. Passing the certifying examination entitles the graduate to use the title "Certified Surgical Technologist."

The surgical staff renders an important service in the overall care of a patient. Good organization of the department and of surgical teams is required. Each individual must know specific functions and responsibilities in order to correlate them with the duties of others.

The surgical technologist works under the direct supervision of a registered professional nurse and/or licensed physician.

## SURGICAL TECHNOLOGY SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TItLe |  |  | C | L | CL | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIO | 101A | Basic Life Sciences | 4 | 2 | 0 | 5 |
| SUR | 1102 | Surgical Safety and Orientation | 5 | 4 | 0 | 7 |
| SUR | 1114 | Principles and Practices of Operating Room Techniques | 4 | 10 | 0 | 9 |
| BIO | 1104 | Introduction to Microbiology | 3 | 0 | 0 | 3 |
|  |  |  | 16 | 16 | 0 | 24 |
| SECOND QUARTER |  |  |  |  |  |  |
| BIO | 101B | Basic Life Sciences | 4 | 2 | 0 | 5 |
| SUR | 1116 | Surgical Procedures and Clinical Practice I | 9 | 0 | 18 | 15 |
| SUR | 1115 | Pharmacology for Operating Room | 2 | 0 | 0 | 2 |
|  |  |  | 15 | 2 | 18 | 22 |
| THIRD QUARTER |  |  |  |  |  |  |
| SUR | 1127 | Surgical Procedures and Clinical Practice II | 9 | 0 | 24 | 17 |
| FOURTH QUARTER |  |  |  |  |  |  |
| SUR | 1128 | Surgical Specialties and Clinical Practice III | 4 | 0 | 33 | 15 |
| TOTAL QUARTER HOURS |  |  |  |  |  |  |
| The Surgical Technology student may select additional elective credits from approved courses and make course substitutions on a credit-for-credit basis upon approval by the student's department chairperson. |  |  |  |  |  |  |
| During the summer quarter, students will be taking night and weekend operating room call as part of their clinical experience. |  |  |  |  |  |  |

## TEACHER ASSISTANT

The Teacher Assistant program is designed to prepare the student for work in assisting the professional teacher, freeing the latter for teaching duties. Students will receive extensive training for duties normally assigned to assistants, including operating audiovisual equipment and making audiovisual teaching/learning materials, typing, and assisting in reading instruction.
The graduate will be prepared to use a variety of audiovisual materials, to make transparencies and stencils, to assist with physical education programs, to construct bulletin boards, and, in general, to help teachers in the performance of classroom duties.

## TEACHER ASSISTANT SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | L | CL | CH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDU | 102 | Child Health and Safety | 3 | 0 | 0 | 3 |
| EDU | 103 | Preschool Orientation | 1 | 0 | 6 | 3 |
| *MAT | 100R | Computational Skills | 5 | 0 | 0 | 5 |
| PSY | 115 | Child Growth and Development: Prenatal-Early Childhood | 3 | 0 | 0 | 3 |
| SPH | 150 | Voice and Diction | 3 | 0 | 0 | 3 |
|  |  |  | 15 | 0 | 6 | 17 |
| SECOND QUARTER |  |  |  |  |  |  |
| BUS | 102 | Beginning Typewriting | 2 | 3 | 0 | 3 |
| EDU | 104 | Preschool Observation | 1 | 0 | 6 | 3 |
| EDU | 231 | Creative Activities | 5 | 0 | 0 | 5 |
| *ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| PSY | 116 | Child Growth and Development: <br> Middle Childhood-Adolescence | 3 | 0 | 0 | 3 |
| PSY | 102 | General Psychology | 3 | 0 | 0 | 3 |
|  |  |  | 17 | 3 | 6 | 20 |
| THIRD QUARTER |  |  |  |  |  |  |
| EDU | 106 | Practicum in Elementary School | 1 | 0 | 15 | 6 |
| EDU | 111 | Language Arts Techniques I | 5 | 0 | 0 | 5 |
| EDU | 115 | Audiovisual and Media Instruction | 3 | 0 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |
| SOC | 101 | Introduction to Sociology | 5 | 0 | 0 | 5 |
|  |  |  | 17 | 0 | 15 | 22 |


| FOURTH QUARTER COURSE TITLE |  | C | 1 |  | Cl |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG 103 | Report Writing | 3 | 0 | 0 |  |
| EDU 203 | Exceptional Child | 5 | 0 | 0 |  |
| EDU 107 | Practicum in Preschool Experience | 1 | 0 | 15 |  |
|  |  | 9 | 0 | 15 |  |
| TOTAL QUARTER HOURS |  |  |  |  |  |
| *If students, as a result of placement tests, are found to be deficient in math and English skills, they will be required to take the appropriate courses from the following list: |  |  |  |  |  |
| ENG 100R-1, 100R-2, 100R-3, 100R-4, 100G, 100G-A, 101-A, 102-A; MAT 099. |  |  |  |  |  |
| The Teacher Assistant student may select elective credits from the list of recommended electives or from other related courses and make course substitutions from appropriate subject areas on a credit-for-credit basis upon approval by the student's department chairperson. |  |  |  |  |  |

## RECOMMENDED ELECTIVES:

BUS 110, 112, 134; CAT 110; COE 100; ECO 102; ENG 105, 106; PHY 120; POL 102; PSY 206; SOC 103; SSC 101

Students may elect to participate in Cooperative Education field experience: COE 101-106.

## WELDING

The Welding curriculum is designed to provide students with opportunities to acquire an understanding of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. The program prepares students for employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, railroads, construction, pipe fitting, production shop, job shop, and many others.
Welders join metals by applying intense heat and sometimes pressure to melt the edges to form a permanent bond. Of the more than 35 different ways of welding metals, arc, gas, and resistance welding are the three most widely used and are emphasized in this program. Closely related to welding is "oxygen cutting."
The principal duty of the welder using manual techniques is to control the melting by directing the heat from either an electric arc or gas welding torch and to add filler metal where necessary to complete the joint. Welders must possess high-level manipulative skill and knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

## WELDING SUGGESTED CURRICULUM BY QUARTERS

| FIRST QUARTER COURSE TITLE |  |  | C | 1 | SH | CH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DFT | 1104 | Blueprint Reading: Mechanical | 3 | 0 | 0 | 3 |  |
| *ENG | 1101 | Reading Improvement | 2 | 0 | 0 | 2 |  |
| *MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |  |
| WLD | 1141 | Beginning Welding | 5 | 0 | 15 | 10 |  |
|  |  |  | 15 | 0 | 15 | 20 |  |
| SECOND QUARTER |  |  |  |  |  |  |  |
| DFT | 1117 | Blueprint Reading: Welding | 3 | 0 | 0 | 3 |  |
| ENG | 1102 | Communication Skills | 3 | 0 | 0 | 3 |  |
| MAT | 1103 | Basic Geometry and Trigonometry | 5 | 0 | 0 | 5 |  |
| WLD | 1142 | Intermediate Welding | 5 | 0 | 15 | 10 |  |
|  |  |  | 16 | 0 | 15 | 21 |  |
| THIRD QUARTER |  |  |  |  |  |  |  |
| DFT | 1118 | Pattern Development and Sketching | 3 | 0 | 0 | 3 |  |
| PSY | 1101 | Human Relations | 3 | 0 | 0 | 3 |  |
| WLD | 1112 | Mechanical Testing and Inspection | 1 | 0 | 3 | 2 |  |
| WLD | 1123 | Inert Gas Welding | 1 | 0 | 3 | 2 |  |
| WLD | 1124 | Pipe Welding | 3 | 0 | 12 | 7 |  |
|  |  |  | 11 | 0 | 18 | 17 |  |
| FOURTH QUARTER |  |  |  |  |  |  |  |
| BUS | 1105 | Industrial Organizations | 3 | 0 | 0 | 3 |  |
| MEC | 1112 | Machine Shop Processes | 1 | 0 | 3 | 2 |  |
| WLD | 1122 | Commercial and Industrial Practices | 3 | 0 | 9 | 6 |  |
| WLD | 1125 | Certification Practices | 3 | 0 | 6 | 5 | 149 |
|  |  |  |  | 0 | 18 | 16 |  |

TOTAL QUARTER HOURS ................................................................... 74
If students, as a result of placement tests, are found to be deficient in math and English "skills, they will be required to take the appropriate courses from the following list:

ENG 1000; MAT 0099, 1000.
The Welding student may select additional elective credits from approved courses and nake course substitutions on a credit-for-credit basis upon approval by the student's department chairperson.
'Students may elect to participate in Cooperative Education field experience: COE 101-106.

## HOSPITAL WARD CLERK

A one-quarter program, the Hospital Ward Clerk Program is designed to prepare qualified men and women to perform a variety of clerical duties such as maintaining patients' charts, requesting equipment and services for patients, requesting supplies and equipment for the nursing unit, and completing all forms correctly. Emphasis is placed on communication techniques, including communication with the hospital staff, physicians, and visitors; and telephone communications. The hospital ward clerk is an important and vital link in the health care team. Clinical experiences provide opportunities for applying classroom learning in the hospital setting.

| FIRST QUARTER COURSE TITLE |  |  |
| :--- | :--- | :--- | :--- | :--- |
| MED | 1100 | Cospital Ward Clerk |
| Theory and Practice |  |  |

## NURSE ASSISTANT

The continuing shortage of nursing personnel has created the need for nurse assistants who are prepared to assist with patient care by performing duties which require limited training.

Working under the supervision of a registered nurse, the nurse assistant has a well-defined role on the nursing team.

Admission requirements to the nurse assistant program are established cooperatively by Pitt Community College and Pitt County Memorial Hospital. All students admitted to the program are potential employees of the hospital. Standards of achievement for the program are established by Pitt Community College. Graduates will receive certificates upon satisfactory completion of the one-quarter program.

| FIRST QUARTER | COURSE TITLE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NUR | 1100 | Nurse Assistant Theory and |
|  | Clinical Practice |  |

## SURVEYING (TECHNICAL SPECIALTY)

The Surveying curriculum is designed for persons interested in learning to assist surveyors or engineers in land, forest, highway, marine, and other types of surveying. The emphasis of the program may be adapted by choice of electives. A certificate is awarded to students completing the program.

The graduates of this program will be prepared to determine exact location and measurements of points, elevations, lines, areas, and contours of the surface of the earth for construction, map making,
land valuation, mining, or other purposes. They may calculate information needed to conduct surveys from notes, maps, deeds, or other records. They will use surveying instruments and perform calculations to verify the accuracy of survey data.

## SURVEYING <br> (TECHNICAL SPECIALTY) SUGGESTED CURRICULUM

| BASIC COURSES COURSE TITLE |  | C | L | SH | CH |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CIV | 101 | Surveying | 2 | 0 | 6 |
| CIV | 102 | Surveying | 2 | 0 | 6 |
| CIV | 103 | Surveying | 2 | 0 | 6 |
| CIV | 204 | Surveying | 2 | 0 | 6 |
| DFT | 101 | Technical Drafting | 0 | 6 | 0 |
| MAT | 101 | Algebra I | 5 | 0 | 0 |
| MAT | 102 | Trigonometry | 5 | 0 | 0 |
| MA |  |  |  |  |  |

TOTAL QUARTER HOURS .................................................................. . . 28
Students who wish to acquire additional surveying skills may take any of the following courses:

## ELECTIVE COURSES

| CIV | 110 | Surveyor Practices | 1 | 0 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CIV | 223 | Codes, Contracts, and Specifications | 2 | 0 | 0 | 3 |
| FOR | 208 | Forest Surveying | 2 | 0 | 3 | 3 |
| MAT | 103 | Algebra II | 5 | 0 | 0 | 5 |

$152$


Course Descriptions


## COURSE PREFIX IDENTIFICATION

Prefix Identification Page
ACT ....... Accounting ..... 156
AGR ...... Agriculture ..... 156
AHR ...... Air Conditioning, Heating, and Refrigeration ..... 161
AIB ....... Banking ..... 163
ANT ...... Anthropology ..... 167
ARC ....... Architecture ..... 167
ART ...... Art ..... 168
BIO ...... Biology ..... 168
BUS ...... Business ..... 170
CAR ...... Carpentry ..... 178
CAT ...... Commercial Art ..... 179
CHM ..... Chemistry ..... 182
CIV ....... Civil Engineering ..... 183
CJC ....... Criminal Justice ..... 184
COE ...... Cooperative Education ..... 186
COS ...... Cosmetology ..... 187
CSC . . . . . . . . Correctional Science ..... 187
DFT ...... Drafting ..... 188
ECO ...... . Economics ..... 191
EDP ...... Electronic Data Processing ..... 192
EDU ....... Education ..... 194
EGY . . . . . . . . Energy ..... 196
ELC . . . . . . . Electricity ..... 197
ELN ....... Electronics ..... 199
ENG ....... English ..... 202
ENV ....... Environment ..... 207
FOR ...... Forestry ..... 210
GEO ...... Geography ..... 210
154 HEA ...... Health ..... 210
HIS ....... History ..... 211
HSA ...... Human Services ..... 211
INS ....... Insurance ..... 213
ISC ........ Industrial Science ..... 213
JOU ...... Journalism ..... 215
LEC ........ Legal Education ..... 216
LIB ........ Library Science ..... 217
MAS ...... Masonry ..... 218
MAT ..... Mathematics ..... 218
MEC ...... . Mechanics ..... 221
MED Medical ..... 224
MHA ..... Mental Health ..... 224
MUS Music ..... 226
NUR ...... Nursing ..... 226
NUT ...... Nutrition ..... 229
ORI ...... Orientation ..... 229
PED ...... Physical Education ..... 229
PHI ........ Philosophy ..... 231
PHO ...... Photography ..... 231
PHY ....... Physics ..... 231
PLU ....... Plumbing ..... 233
PME Power Mechanics ..... 233
POL . ...... Political Science ..... 236
PSC ....... Police Science ..... 236
PSY . . . . . . . Psychology ..... 237
RDT ....... Radiology ..... 240
RLS ....... . Real Estate ..... 242
REL Religion ..... 242
SOC ...... Sociology ..... 242
SPH Speech ..... 243
SSC ........ Social Science ..... 244
SUR ....... Surgical ..... 244
WLD ..... Welding ..... 245


|  | Class | Lab | Clinical/Credit <br> Shop | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ACCOUNTING | 3 | 2 | 0 | 4 |

Basic accounting concepts as applied to a single proprietorship. Practical problems requiring the use of journals and general ledgers, preparation and analysis of work sheets, the balance sheet, and income statements. Introduction to basic concepts of internal control included.

| ACT | 151 | Prirciples of Accounting | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ACT 150
An expanded study of the accounting cycle with emphasis on the recording, summarizing, and interpreting of data for management control. Includes a study of payrolls, federal and state taxes, and basic applications for computerized accounting.

## $\begin{array}{lllllll}\text { ACT } 152 & \text { Principles of Accounting } & 3 & 2 & 0 & 4\end{array}$

Prerequisite: ACT 151
Partnership and corporation accounting, including a study of financial statement analysis and use of financial ratios.

## AGRICULTURE

| AGR | 103 | Feeding and Management | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of applied principles and concepts of animal nutrition. Problems associated with feeding livestock, nutritional diseases, balancing rations, feed additives, feedstuffs, and anatomy and physiology of the digestive systems of farm animals. Includes management and economic problems associated with the feeding and marketing of livestock.

| AGR | 105 | Pastures and Forage Crops | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the major grasses and legumes of economic importance in North Carolina. Attention given to management, soil types, fertilization, harvesting, and nutrient value.
$\begin{array}{lllllll}\text { AGR } & 107 & \text { Farm Records and Taxes } & 3 & 0 & 0 & 3\end{array}$
Introductory course to accounting methods related to farm business; acquaints students with the terminology and basic principles and techniques used in recording transactions. Practical application of the principles learned made by working with actual farm situations. Study of taxes as related to farm income including tax forms, deductions, depreciation, and tax schedules applicable to farmers.
$\begin{array}{lllllll}\text { AGR } & 112 & \text { Small Engine Repair } & 2 & 3 & 0 & 3\end{array}$
Study of two-and four-cycle, one-cylinder gasoline engines and their power trains. Students taught preventive maintenance, troubleshooting, and repair of the typical auxiliary engine on the farm.

## $\begin{array}{lllllll}\text { AGR } & 119 & \text { Techniques of Welding } & 2 & 3 & 0 & 3\end{array}$

Study of principles of oxyacetylene and electrical welding, cutting, and brazing; principles, procedures, safety precautions, and experience in using oxyacetylene and arc welding equipment; and projects to develop skill in the use of equipment. Also includes a study of metals, rods, gases, and special electrical welding machinery.

AGR 121 Crop Production $\quad$ Class |  | Clinical/ Credit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |  |

Study of the characteristics of field crops relative to varieties, environmental factors, rotations, fertilization, control of pests, and cultural practices pertinent to crop production.

## AGR 125 Animal Science <br> $5 \quad 2 \quad 0$ <br> 6

Introductory animal science course covering the financial principles of livestock production. Study of the animal body and the basic principles of reproduction, genetics, growth, fattening, and digestion; and of the selection, feeding, improvement, processing, and marketing of livestock.

| AGR 127 | Animal Nutrition | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Deals with the principles of nutrition and their application to feeding practices in cattle, horses, sheep, and swine production in North Carolina.

AGR 128 Farm and Home Construction $2 \begin{array}{llll}3 & 3 & 0 & 3\end{array}$
Deals with the fundamentals of farm carpentry, fences, concrete, and masonry. Part of the course gives students an opportunity to learn and practice home construction projects such as farm utility buildings. Also includes a study of farm water needs and waste disposal. Attention is given to planning farm water and plumbing systems and their proper care and maintenance.

AGR 135 Agricultural Law | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Designed to acquaint the agricultural student with certain fundamentals and principles of law, including contracts, agency, and negotiable instruments. Includes the general study of law pertaining to partnership, corporation, sales, suretyship, bailments, and real property.
AGR 136. Agricultural Mathematics $\quad 5 \quad 0 \quad 0 \quad 0 \quad 5$

Stresses the fundamental mathematics operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent use of mathematics in the field of business.

## AGR 149 Introduction to Plant Science and Horticulture

Introduction to botany as applied to higher plants. The fundamental principles of plant processing, reproduction (sexual and asexual), growth, and development. Application of plant processes to certain commercially grown field and horticultural crops.

## $\begin{array}{llllll}\text { AGR } 150 & \text { General Horticulture } & 3 & 2 & 0 & 4\end{array}$

Deals with horticultural principles and the application of plant science fundamentals to horticultural practices.

AGR 154 Swine Production | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Study of the scientific methods of selecting, breeding, feeding, and managing swine. Special attention is given to housing and marketing.

|  | Class | Lab | Clinical/ Credit <br> Shop | Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGR | 155 | Introduction to Food Science | 3 | 2 | 0 |

Introductory study of various phases of food science and processing. Attention will be given to development, size, distribution, and future of the processing industry. Basic principles of food preservation and unit operations covering canning, freezing, dehydration, concentration, and fermentation will be stressed.

| AGR | 170 | Plant Science | 5 | 2 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seedbearing plants with application to certain commercially important plants in North Carolina.

| AGR | 185 | Soil Science and Fertilizers | 5 | 2 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Deals with the basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil; and conservation of soil fertility.

| AGR | 187 | Fertilizers and Lime | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Review of the source, function, and use of the major and minor plant food elements; commercial fertilizer ingredients; soil acidity and liming materials; and the application of fertilizer and liming materials.
$\begin{array}{lllllll}\text { AGR } & 188 & \text { Cultural and Irrigation Practices } & 3 & 2 & 0 & 4\end{array}$
Deals with various tillage and cultural practices such as conventional, "no-till," and minimum tillage; the economical aspects of labor and fuel efficiency; and drainage and timely application of supplemental water to obtain maximum output.
$\begin{array}{lllllll}\text { AGR } 201 & \text { Agricultural Chemicals (Pesticides) } & 3 & 2 & 0 & 4\end{array}$
Study of agricultural chemicals and their importance; the ingredients, formulation, and application of farm chemicals; and the effective and safe utilization of chemicals in agricultural pest control. Major emphasis is placed on insecticides, fungicides, nematocides, herbicides and other commonly used pesticides.

## $\begin{array}{lllllll}\text { AGR } & 203 & \text { Pesticide and Fertilizer Application } & 3 & 2 & 0 & 4\end{array}$

Study of and practical exercise in the correct application of pesticides and fertilizers. Economics of custom application and equipment, precautions, and legal aspects of application are presented.
$\begin{array}{lllllll}\text { AGR } 204 & \text { Agricultural Economics } & 3 & 2 & 0 & 4\end{array}$ and Farm Records

Introduction to economics, the functions of the economic system, and agriculture's role in the economy. Economic principles as applied to the decision-making process in the analysis of farm records are also included.
$\begin{array}{lllllll}\text { AGR } & 205 & \text { Agricultural Marketing } & 3 & 2 & 0 & 4\end{array}$
Analysis of the functions of marketing in the economy; a survey of the problems marketing faces; and a review of the market structure and the relationship of local, terminal, wholesale, retail, and foreign markets. Problems in the operations of marketing firms, including buying and selling, processing, standardization and grading, risktaking and storage, financing, efficiency, and cooperation; and discussions of procedures for marketing commodities such as grain, cotton, livestock, and tobacco are included.

|  | Class | Lab | Clinical/ Credit <br> Shop | Hours |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| AGR 207 | Poultry Enterprises | 3 | 2 | 0 | 4 |

Review of the growth of the various poultry enterprises including market eggs, hatching eggs, and broiler production; marketing procedures; determining and controlling costs of production; choosing breeds and determining flock size, feeding systems, conversion ratios, labor efficiency, and other management factors.

| AGR | 215 | Farm Machinery Repair <br> and Maintenance | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Selection, care, and repair of large units of farm equipment and operating principles of self-propelled and tractor-drawn equipment studied in the classroom and in the field. Equipment such as balers, combines, corn pickers, cotton pickers, and peanut harvesters included in the study.

| AGR | 218 | Agricultural Mechanization | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of farm machinery management, laborsaving devices, and the economics of selection and operation of farm machinery. Includes study and evaluation of feed grinders and mixers, storage facilities, materials handling systems, and other laborsaving devices.

| AGR 222 | Farm Electrification | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the basic principles and systems of farm electrification and their application to agricultural production, with emphasis on equipment for controlling the utilization of electricity.

| AGR 223 | Livestock Production | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the basic principles of livestock production, including the breeding, feeding, care, and management of farm animals.

## AGR 225 Agricultural Pollution Control <br> $\begin{array}{llll}3 & 2 & 0 & 4\end{array}$

Study of the relationship between agriculture and environmental pollution. Topics covered include soils, control of animal wastes and feedlot management, pesticide use and misuse, biological control of agricultural pests, fertilizer runoff and control, stream sedimentation, the use of land for disposal of municipal wastewater, and state and federal regulations related to agricultural pollution.

AGR 227 Beef Production | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Study of beef production including the selection, breeding, feeding, care, and management of a beef herd. The economical aspects of various systems of beef production.

| AGR 228 | Plant and Animal Diseases | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the germ theory of disease as applied to plant and animal production. Common plant and animal diseases and their symptoms, prevention, and control measures are included in the study.

AGR 245 Crop Insects $\quad 3$| 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- |

Study of common crop insects, their economic importance, identification, life cycles, and hosts. Field trips to study insect damage to crops in the area.

| AGR | 247 | Class | Lab | Clinical/ Credit <br> Shop | Hours |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Pesticides and Their Use In <br> Home and Community | 3 | 2 | 0 | 4 |  |

Study of the use of pesticides including their function, ingredients, beneficial aspects, and environmental hazards, with major emphasis on safe application and handling. Biological and other alternative methods of pest control are studied.

## AGR 254 Plant Propagation <br> $3 \quad 2 \quad 0$ <br> 4

Study of basic concepts and principles of sexual and asexual propagation. Techniques are learned through practical exercises conducted in laboratory sessions. Emphasis is given to those propagation methods widely utilized in the industry.

## $\begin{array}{lllllll}\text { AGR } 272 \text { Tobacco Production } & 3 & 2 & 0 & 4\end{array}$

Review of the economic importance of tobacco in North Carolina, detailed study of certain aspects of the production and marketing of tobacco, and brief look at the processing and manufacturing phases.

AGR 273 Corn, Peanut, and Soybean $\begin{array}{llllll}\text { Production } & 3 & 2 & 0 & 4\end{array}$

Production, marketing, and improvement of corn, peanuts, and soybeans are covered in this course. The latest research information on seed varieties, fertilization, disease, weed control, cultural practices, equipment, havesting, and marketing are stressed.

## $\begin{array}{lllllll}\text { AGR } & 278 & \text { Weed Identification and Control } & 3 & 2 & 0 & 4\end{array}$

Study of the identification and control of annual and perennial weeds of economic importance in North Carolina.

| AGR 279 | $\mathbf{3}$ Farm Forestry | 2 | 0 | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Deals with the fundamentals of forestry and farm forestry problems, including planting, thinning, protecting, harvesting, and marketing.

| AGR 285 | Soil Fertility | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Deals with soil fertility principles and the application of these principles to North Carolina soils, soil fertility evaluation, and soil conservation practices.

## $\begin{array}{lllllll}\text { AGR } 290 & \text { Soil and Water Conservation } & 3 & 2 & 0 & 4\end{array}$

Introduction to soil, water, and plant conservation; the available resources to carry out soil and water conservation measures; and the relationship of specialized knowledge in agronomy, economics, engineering, soils, forestry, and recreation.

## $\begin{array}{lllllll}\text { AGR } 296 & \text { Agricultural Programs and Agencies } & 3 & 0 & 0 & 3\end{array}$

Preview of public agricultural programs and agencies that provide services for agricultural producers, including their objectives, organization, functions, and services.

| AGR | 297 | Agricultural Policy and Programs | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Concerned with the processes of agricultural policy formation in a democratic society and the role of individual and group actions in the development of public programs. Policies and programs are analyzed, including the relationship to demand, supply, income, population, the nature of agricultural production, and social welfare.

# AIR CONDITIONING, HEATING, AND REFRIGERATION 

| AHR 101 | Air Conditioning and Refrigeration | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introduction to the air conditioning and refrigeration field and to terminology relating to heating and cooling systems. Topics included are the basic laws of refrigeration, heat and heat transfer methods, servicing tools and equipment, and tubing and fittings. Shop practice will be given in operations such as tube bending, flaring, swaging, and soldering.

| AHR 106 | Architectural Mechanical Equipment | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

General study of heating, air conditioning, plumbing, and electrical equipment, materials, and symbols, and building code requirements pertaining to residential and commercial structures. Reading and interpretation of working drawings prepared by mechanical engineers and coordination of mechanical and electrical features with structural and architectural designs are included.

| AHR 201 | Principles of Heating | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Warm air systems, heat emitter, electric heating, forced hot water and steam heating systems including selection and sizing of equipment such as registers, grills, furnaces, boilers, radiators, baseboards, piping, and ducts. Heating layout and specifications for an existing structure or one on blueprint stage will be prepared.
$\begin{array}{lllllll}\text { AHR } & 1101 & \text { Automotive Air Conditioning } & 3 & 0 & 6 & 5\end{array}$
General introduction to the principles of refrigeration. Includes a study of the assembly of the components and connections necessary in the mechanisms, methods of operation and control, proper handling of refrigerants in charging the system, use of testing equipment in diagnosing trouble, and efficiency tests and general maintenance work.

## AHR 1102 Introduction to Cooling and Heating Systems

Covers the basic principles of cooling and heating related to industrial systems. Air conditioning, refrigeration, and heating systems are studied as well as fluid flow, air distribution, and control systems. Special industrial cooling and heating systems are included.
AHR 1107 Gas Laws Refrigeration $\quad 2 \quad 0 \quad 3$

Terminology, laws of refrigeration, absolute pressure and absolute temperature, energy conversion units; specific heat; latent heat, and sensible heat; measurement of heat in quantity and intensity; tone of refrigeration, pressure temperature relationship; transfer of heat by conduction, convection, and radiation.

## $\begin{array}{lllllll}\text { AHR } & 1115 & \text { Fundamentals of Heating } & 2 & 0 & 6 & 4\end{array}$

An introduction to the fundamentals of heating and heat transfer related to various types of heating systems. The user 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

| Class | Lab |
| :---: | :---: |
| 3 | 0 |

An introduction to the principles of refrigeration. Terminology, the use and care of tools and equipment, and the identification and the function of the component parts of refrigeration systems are covered. Practical work with hand tools, materials, piping, and ductwork is given to develop basic skills in the installation of refrigeration systems. Standard procedures and safety measures are stressed.

## $\begin{array}{lllllll}\text { AHR } 1122 & \text { Domestic and Commercial } & 3 & 0 & 6 & 5\end{array}$ Refrigeration

## Prerequisite: AHR 1121

Domestic refrigeration servicing of conventional, and hermetic systems. Cabinet care, controls, and system maintenance in window air conditioning units and domestic refrigerators and freezers are stressed. Commercial refrigeration servicing of display cabinets, walk-in cooler and freezer units, and mobile refrigeration systems are studied. Manufacturer's catalogs are used in sizing and matching system components and a study of controls, refrigerants, heat reclamation maintenance, and servicing methods is made. The American Standard Safety Code for Refrigeration is studied and its principles practiced.

## $\begin{array}{llllllll}\text { AHR } & 1123 & \text { Principles of Air Conditioning } & 3 & 0 & 12 & 7\end{array}$

Prerequisite: AHR 1122
Includes a study of the selection of various heating, cooling, and ventilation systems and the investigation and control of factors affecting air cleaning in air movement, temperature and humidity. Psychrometric charts are used in determining optimum temperature, and humidity control. Commercial air conditioning equipment is assembled and tested. Practical sizing and balancing of duct work is performed as needed.

| AHR | 1124 | Air Conditioning, Heating and <br> Refrigeration Servicing | 3 | 0 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: AHR 1123
Emphasis is placed on the maintenance and servicing of equipment used in the cleaning, changing, humidification and temperature control of air in an air conditioned space. Shop work involves locating and correcting equipment failures and controlling, testing, and adjusting heating and cooling equipment to maximize energy conservation.
$\begin{array}{lllllll}\text { AHR } & 1126 & \text { All Year Comfort Systems } & 3 & 0 & 6 & 5\end{array}$
Prerequisite: AHR 1123, AHR 1128
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 | 3 | 0 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 1102, AHR 1122
Types of automatic controls and their function in heating and cooling systems. Included in the course will be electric, electronic, mechanical, and pneumatic controls for domestic and commercial heating and cooling along with zone controls, unit heater and ventilator controls, commercial fan system controls, commercial refrigeration controls, and radiant panel controls.

# BANKING AND FINANCE 

## AIB 111 Business Administration

Class \begin{tabular}{cccc}

Lab \& \begin{tabular}{c}
Clinical/ <br>
Shop

 \& 

Credit <br>
Hours
\end{tabular} <br>

4 \& 0 \& 0 \& 4
\end{tabular}

Emphasis placed on the managerial responsibility of coordinating carefully the many facets of a business enterprise. Also stresses the background of administration, financial management, production, labor-management relations, marketing, coordination and control, and public relations problems.

## AIB 120 Accounting I $4 \begin{array}{lllll}4 & 0 & 0 & 4\end{array}$

Comprehensive treatment of all up-to-date principles giving the student ample opportunity through examples, illustrations, and correlated activities to learn how the principles are applied. End-of-unit summaries have special sections for both principles and managerial implications.

## AIB 121 Accounting II <br> 400

Prerequisite: AIB 121
Content of this course selected with two major objectives in mind: immediate on-thejob usefulness and contribution to the student's future growth in the banking field. Consists of a detailed study of balance sheet items, covers manufacturing accounting and production costing, and includes an appropriate study of cost analysis for managerial decisions.

| AIB | 122 | Fundamentals of Bank Data <br> Processing | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

This course is designed for non-data processing personnel at any level who would like a general understanding of data processing principles and their banking applications. The course presents the concepts of data processing and the basic functions of computers using analogies and illustratons from the banking industry. It discusses present and future bank applications of data processing, including MICR and EFTS.

| AIB | 123 | Financing Business Enterprise | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Stress is placed on the difference between lending and investing, and on the fact that investing in a corporation and financing a corporation are different aspects of the same subject. Material is presented from the veiwpoint of the corporate treasurer who must safeguard the financial future of the corporation.
$\begin{array}{lllllll}\text { AIB } & 202 & \text { Principles of Bank Operation } & 4 & 0 & 0 & 4\end{array}$
Fundamentals of bank functions in a descriptive fashion so that the beginning banker may view the profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement.
AIB 203 Bank Investments 4 0 0

Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course describes the nature of such funds and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial banks, the sources of reserves, and their random and cyclical fluctuations, showing the influence of these factors on investment policy. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings.

|  |  | Clinical/ Credit |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| AIB | 204 | Bank Management By Objectives | 0 | 2 | 0 | 1 |

Middle management seminar designed to assist bank officers in learning how to translate bank problems into realistic goals for the individual and the bank, through the management-by-objectives system. Cases and outside readings are used in this seminar. It can be presented as a brief, intense workshop or an eight-session seminar.
$\begin{array}{lllllll}\text { AIB } 205 & \text { Bank Management } & \mathbf{4} & 0 & 0 & 4\end{array}$
Philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management.

| AIB 206 | Bank Letters and Reports | $\mathbf{4}$ | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Designed for those bank officers, supervisors, and employees who dictate or review correspondence. Since bank letters are actually public relations documents, all persons should be familiar not only with the mechanical forms of bank letters, but also with the psychological principles that help the letter writer achieve best results. Reviews letter forms, emphasizes fundamental principles underlying modern correspondence, and examines different kinds of bank letters.

AIB 207 International Banking 4 | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Introduction to a vast field for those working in international departments, as well as for those involved in the domestic activities of their banks. Presents the basic framework and fundamentals of international banking; how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another.
AIB 208 Conference Planning and Leadership $0 \quad 2 \quad 0 \quad 0 \quad 1$

Centered on a specific phase of the problem of human understanding. The course is concerned with an important responsibility of management: to communicate and to coordinate ideas in the most effective way possible. Consideration is given to the dynamics of human interaction in groups convened to solve problems and make decisions. The essentials of parliamentary procedure are also stressed, thus presenting an effective technique for achieving consensus and formalizing and recording the decision-making process.
$\begin{array}{lllllll}\text { AIB } 209 & \text { Installment Credit } & \mathbf{4} & 0 & 0 & 4\end{array}$
Techniques of installment lending presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its profits on this particular kind of credit. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending.
AIB 210 Money and Banking 4

Stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply his knowledge to his particular job. Historical treatment kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank
Class Lab Clinical/ Credit
control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and structuring of portfolios.

| AIB 212 | Planning Management Development | 0 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Middle management seminar designed to assist bank officers who are responsible for the planning, recruiting, and development of bank management personnel. Cases and outside readings are used. It can be presented as a brief, intense workshop or as a twelve-session seminar.
AIB 213 Trust Functions
40
0
4

Presents a complete picture of the services rendered by institutions engaged in trust business. Providing an introduction to the services and duties involved in trust operations, the course is intended for all bankers, not just those who are engaged in trust business. It endeavors to keep clear the distinction between business and legal aspects of trust functions.

| AIB 214 | Effective Speaking | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Students given an opportunity to study all phases of speech situations. Directed primarily to the student seeking to give an account on the public platform. Other speech situations are not neglected. Having studied the basic principles involved in organizing and presenting a speech, students are given suggestions to aid in developing speaking ability in situations such as conferences, panel discussions, radio, and television.
$\begin{array}{lllllll}\text { AIB } 219 & \text { Credit Administration } & 4 & 0 & 0 & 4\end{array}$
Directed toward the executive level, concerned partly with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation and analysis, credit techniques, specific credit problems, and regular as well as unusual types of loans are discussed.

AIB 231 Savings and Time Deposit Banking $4 \begin{array}{lllll}4 & 0 & 0 & 4\end{array}$
Reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. Begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment.

| AIB | 232 | Agricultural Finance | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Reflecting the rapid growth of the off-farm agribusiness sectors (the suppliers of farm inputs), this course emphasizes general principles associated with the evaluation of management and the use of capital rather than the examination of land and labor resources which are more closely aligned with agricultural production. An understanding of agricultural finance should help the banker in satisfying the credit needs of modern agriculture.

| AIB | 233 | Analyzing Financial Statements | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Characteristics of financial statements and financial statements analysis. The first section serves as a useful review of basic accounting principles for those students who have

Class Lab Shop Hours studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis.
$\begin{array}{lllllll}\text { AIB } 234 & \text { Loss Prevention } & 0 & 2 & 0 & 1\end{array}$
This seminar focuses on check cashing, check swindles, bank holdups, and security procedures.

| AIB Loan and Discount 235 | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

This seminar teaches bank employees the essential facts about promissory notes, including calculating interest and discounting commercial paper; guarantees; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure.

| AIB 236 | 4 | 0 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Approaches the subject from the viewpoint of the mortgage loan officer who seeks to develop a sound mortgage portfolio. A picture of the mortgage market is presented first; then the acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing; and finally the obligations of the mortgage loan officer in overall portfolio management.
$\begin{array}{lllllll}\text { AIB } 237 & \text { Selling Bank Services } & 0 & 2 & 0 & 1\end{array}$
Teaches tellers and new-accounts personnel how to recognize and meet bank customer needs; checking accounts, savings services, loans to individuals, and safe deposit boxes, travelers' checks, and cross selling.

## $\begin{array}{lllllll}\text { AIB } & 239 & \text { Bank Public Relations and Marketing } & 4 & 0 & 0 & 4\end{array}$

Discusses the basis of public relations, both internal and external, and seeks to explain the why, the what, and some of the how of public relations and marketing. Intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing.

## $\begin{array}{lllllll}\text { AIB Law and Banking } 259 & 4 & 0 & 0 & 4\end{array}$

Introduction to basic U. S. law, presenting the rules of law which underlie banking. Topics include jurisprudence, the court system and civil procedure, contracts, quasicontracts, property, torts and crimes, agencies, partnerships, corporations, sales of personal property, commercial paper, bank deposits and collections, documents of titles, and secured transactions. Emphasis is on the Uniform Commercial Code.
$\begin{array}{lllllll}\text { AIB } 272 & \text { Supervision and Personnel } & 4 & 0 & 0 & 4\end{array}$ Administration

Designed to aid first-line supervisors in making a smooth transition from expert in a particular task to the role of a supervisor who must produce results through the efforts of other people. In this role, the first-line supervisor must reflect management attitudes and carry out management policies while at the same time inspiring his group to achieve friendly cooperation and maximum production.
ANTHROPOIOGY Class Lab Clinical/ Credit

| ANT | 150 | Introduction to Anthropology | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: Specified score on reading placement test or ENG 100R4 General introduction to anthropology, the science of man as the culture-bearing animal. Topics considered: physical evolution of mankind and biological variations within and between modern human populations, prehistoric and historic developments of culture, cultural dynamics viewed analytically and comparatively.


#### Abstract

$\begin{array}{llllllll}\text { ANT } & 160 & \text { Societies Around the World } & 5 & 0 & 0 & 5\end{array}$ Prerequisite: Specified score on reading placement test or ENG 100R4 Ethnographic survey of world culture areas showing similarities and variations in cultural patterns.


## ARCHITECTURE


#### Abstract

ARC 106 Architectural Drafting $\quad 2 \quad 6 \quad 0 \quad 0 \quad 4$


Designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting included are the use of drafting equipment, lettering, pictorial sketching, geometric construction, and orthographic instrument drawing of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, and solids, and the principles of isometric, oblique, and perspective drawings are included. Applications of descriptive geometry are used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections, and developments.

## ARC 107 Architectural Drafting $\quad 2 \quad 6 \quad 0 \quad 4$

Prerequisite: ARC 106
Includes the development of techniques in architectural lettering, symbols, dimensioning, freehand and instrument drafting, and the development of a complete set of working drawings for a residence, with construction details and the use of appropriate material symbols and connections. Section, scale details, and full-size details will be prepared from preliminary sketches.
ARC 108 Architectural Drafting $\quad 0 \quad 9 \quad 0 \quad 3$
Prerequisites: ARC 107, AHR 106, CIV 105
An indepth approach to the study of architectural drafting. Development of techniques in architectural lettering, dimensioning, freehand sketching and instrument drawing, and drawings of construction details, using appropriate material symbols will be included. A continuation of ARC 107, this course includes an introduction to commercial working drawings. Working drawings, including plans, elevations, sketches, scale details, and wall section details are prepared from preliminary sketches.

| ARC 201 | Architectural Design I | 3 | 9 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Prerequisite: ARC 107

Basic design principles; development of design as it relates to the details, structure, and aesthetic functions of buildings; design presentations and architectural models; and group and individual problems in design.

|  |  | Clinical/ | Credit |
| :---: | :---: | :---: | :---: |
| Class | Lab | Shop | Hours |
| 2 | 3 | 0 | 3 |

Prerequisite: ARC 107
Design principles of regional and city planning, research reports, maps, and problems in environmental design.

| ARC 220 | Architectural Drafting | 2 | 9 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ARC 108
Includes commercial working drawings; materials used in commercial buildings; systems of construction; and drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction are studied. Reference materials are used to provide the draftsman with skills and knowledge in locating data and in using handbooks.

## ARC 221 Architectural Drafting <br> 290 <br> 5

Prerequisite: ARC 220
Individual or group projects which involve the coordination of working drawings for commercial work. Consideration is given to coordination of mechanical and electrical features with structural and architectural components. A two-week problem in model building or architectural presentation work is included.

## $\begin{array}{lllllll}\text { ARC } 222 & \text { Architectural Drafting } & 2 & 9 & 0 & 5\end{array}$

Prerequisites: ARC 221, CIV 101, DFT 235
Preparation of a complete set of working drawings for the architectural structure, coordinating floor plans, elevations, wall sections, and details. Site and landscaping plans are studied and drawn. Final assembly of the complete document for construction purposes made. Plans include environmental and energy considerations.

| ARC 233 | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the professional relationship of the architectural firm to clients, contractors, suppliers, consultants, and other architects. Ethics of the profession as applied to the draftsman's role in the architectural firm are emphasized as well as the legal aspects of architectural practice.

## ART

ART 160 Art Appreciation $\quad 3 \quad 0 \quad 0 \quad 0 \quad 3$

Exploratory study of the visual experience; intended to enhance the student's understanding and enjoyment of art.

## $\begin{array}{lllllll}\text { ART } 170 & 5 & 0 & 0 & 5\end{array}$

Study of principles common to all visual work emphasizing color, line, shape, space, volume, texture, and their psychological and physical effects on the viewer.

## BIOLOGY

BIO 101 Basic Life Sciences
Foundation of facts and principles in the normal structure and related functioning of the following body systems: skeletal, muscular, digestive, circulatory, respiratory, uri-

$$
\begin{array}{ccl} 
& \text { Clinical/ Credit } \\
\text { Class Lab } & \text { Shop Hours }
\end{array}
$$

nary, reproductive, endocrine, integumentary, nervous, and special sense organs. Presents principles and concepts of physiology and immunology. Presentation of the normal body as a basic for understanding variations from the normal.

BIO 101A Basic Life Sciences
4020
5
Basic background in normal human anatomy and physiology. Body systems covered include skeletal, muscular, nervous, digestive, circulatory, and special senses. Presents basic foundation facts as related to health and disease.
$\begin{array}{lllllll}\text { BIO 101B Basic Life Sciences } & 4 & 2 & 0 & 5\end{array}$
Prerequisite: BIO 101A
Continuation of BIO 101A with emphasis on the body systems such as respiratory, urinary, reproductive, endocrine, and digestive.
BIO 106 Microbiology $\quad 2 \quad 2 \quad 0 \quad 3$

Prerequisite: BIO 101 (minimum grade of "C")
A study of basic microbiology and its relationship to health and disease. Includes basic laboratory practice, microbial physiology, environmental, medical, and applied microbiology.

## BIO 107 Anatomy and Physiology I $\quad 4 \quad 2 \quad 0 \quad 5$

A study of the structure and normal function of the human body with man identified as a living organism composed of living cells, tissue, organs, and systems. An introduction to radiographic positioning, as well as the anatomy, and positioning of the chest, abdomen, and upper extremities. A laboratory portion for student to position the anatomical parts covered.

## BIO 108 Anatomy and Physiology II $4 \begin{array}{lllll} & 2 & 0 & 5\end{array}$

Continuation of the study of the structure and normal function of humans as living organisms. Special emphasis is on the circulatory, lymphatic, digestive, nervous, endocrine, reproductive systems, special senses, and fluid and electrolyte balance. Laboratory experiences include study of models and small animal dissection for insight into comparative structure and function of humans.
$\begin{array}{lllllll}\text { BIO } 201 \text { Human Anatomy and Physiology I } & 3 & 2 & 0 & 4\end{array}$
Prerequisite: BIO 106, CHM 110
An advanced study of the anatomy and physiology of the human body including study of the cell, skeletal, muscular, nervous, and reproductive systems. Emphasis is placed on body processes as they apply to the normal and disease states.
$\begin{array}{lllllll}\text { BIO } 202 \text { Human Anatomy and Physiology II } & 3 & 2 & 0 & 4\end{array}$
Prerequisite: BIO 201 (minimum grade of "C")
A continuation of the study of human anatomy and physiology with consideration of the cardiovascular, digestive, respiratory, urinary, endocrine, and integumentary systems and a study of fluid and electrolyte balance. Emphasis is placed on body processes as they apply to normal and disease states.
BIO 208 Pathology $\quad 3 \quad 0 \quad 0 \quad 3$

Prerequisite: BIO 108
Detailed study of various diseases with emphasis on the ones most commonly seen in
the radiology department. Radiographic appearance of the disease and the effect on radiographic exposure required for accurate visualization are dealt with in depth.

BIO 250 General Biology I | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: Specified score on reading placement test
Introduction to basic biological concepts and principles; a study of the chemical and physical properties of the living cell; cell structure-function relationship; and cell reproduction and genetics.

BIO 251 General Biology II $\begin{array}{lllll}3 & 2 & 0 & 4\end{array}$
Prerequisite: Specified score on reading placement test
A survey of the five kingdoms with emphasis on structure-function relationships and on phylogenetic complexity. In addition, vertebrate nutrition and digestion, gas exchange. blood and transport systems, and animal excretion will be studied.

BIO 252 General Biology III |  | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: BIO 251
A continuation of the study of vertebrate systems including skeletal, muscular, reproductive, endocrine, and temperature regulating systems. The structure, growth, transport system, and reproductive system of vascular plants will be studied. Ecosystems, ecology, and evolution are also considered.
$\begin{array}{lllllll}\text { BIO } & 1104 & \text { Introduction to Microbiology } & 3 & 0 & 0 & 3\end{array}$
Presentation of the basic principles of microbiology to aid students in understanding the relationship of microorganisms with the maintenance of health and the cause, control, and prevention of disease.

BUSINESS

## BUS 100 Business Education Orientation $1 \begin{array}{lllll}\mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{1}\end{array}$

Orientation to the business community; emphasis on employment opportunities in the secretarial and clerical fields, entry level job requirements, services of local employment agencies and personnel departments, and procedures to follow in obtaining employment. Activities will include guest speakers from the business community and the business education department.

| BUS | 102 | Beginning Typewriting | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Emphasis on study of the keyboard, mechanics of the typewriter necessary for the acquisition of elementary typewriting skills, and development of speed and accuracy.
$\begin{array}{lllllll}\text { BUS } & 103 & \text { Intermediate Typewriting } & 2 & 3 & 0 & 3\end{array}$
Prerequisite: BUS 102 or equivalent
Development of speed and accuracy with further mastery of correct typewriting techniques as-applied to tabulation, manuscript, correspondence, and business forms.
$\begin{array}{lllllll}\text { BUS } & 104 & \text { Advanced Typewriting } & 2 & 3 & 0 & 3\end{array}$
Prerequisite: BUS 103
Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as a typist, producing mailable copy.

|  |  |  | Clinical/ Credit |  |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: |
| BUS | Class | Lab | Shop | Hours |
|  | 2 | 3 | 0 | 3 |

Beginning course in theory and practice of reading and writing Gregg shorthand.

BUS 105B Introduction to Shorthand $\quad 2$| 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisite: BUS 105A or equivalent
Sequel to BUS 105A; emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 106 Beginning Shorthand 50
Prerequisite: ENG 1015
Beginning course in theory and practice of reading and writing Gregg shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.
BUS 106A Shorthand Lab 0

Dictation practice in shorthand lab to accompany shorthand class.

Prerequisite: BUS 106 or equivalent
Corequisite: BUS 113
Continued study of theory with greater emphasis on dictation and elementary transcription.
BUS 107A Shorthand Lab $\quad 0 \quad 5 \quad 0 \quad 0$

Dictation practice in shorthand lab to accompany shorthand class.
BUS 108 Advanced Shorthand $\quad 5 \quad 0 \quad 0 \quad 5$

## Prerequisite: BUS 107

Corerequisite: BUS 114
Review of shorthand principles, daily speed practice, and development of greater dictation and transcription speed.
BUS 108A Shorthand Lab $\quad 0 \quad 5 \quad 0 \quad 0$

Dictation practice in shorthand lab to accompany shorthand class.

| BUS | 110 | Office Machines | 2 | 2 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 100R or equivalent
Training in techniques, processes, operations, and applications of ten-key adding machines, full keyboard adding machines, and electronic and rotary calculators.

BUS $\mathbf{1 1 2}$ Filing $\quad$| 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes, and guides. Students will also become familiar with modern filing equipment.

| BUS | 113 | Machine Transcription I | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Prerequisites: BUS 103, ENG 1015

Introductory course in the correct techniques of operating the dictating and transcribing units, plus fundamentals of transcription such as spelling, punctuation, grammar, letter placement, and the use of reference materials.

BUS 114 Machine Transcription II $\quad$ Class \begin{tabular}{ccccc}

Lab \& \& | Clinical/ Credit |
| :---: |
| Shop | <br>

Hours
\end{tabular}

Prerequisite: BUS 113
Continuation of BUS 113 with additional emphasis on producing mailable business correspondence.
$\begin{array}{lllllll}\text { BUS } & 115 M & 3 & 0 & 0 & 3\end{array}$
Study of the principles of office conduct, ethical responsibility of the office staff with regard to information acquired, and obligations and responsibilities of the medical office worker or transcriber. Laws governing medical practice are also included.

## BUS 117 Office Machines $3 \quad 2 \quad 0 \quad 4$

Prerequisites: BUS 102, MAT 110
Operation of the machines used in duplicating and calculating processes. An understanding of the functions of each machine and how it simplifies office work is developed. An appreciation for accuracy of machine work; and duplicating and calculating machines vocabulary developed.

| BUS | 123 | Business Finance | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study of short-term, long-term, and consumer financing is included.

## $\begin{array}{lllllll}\text { BUS } & 128 & \text { Basic Accounting I } & 3 & 0 & 0 & 3\end{array}$

Study of the basic accounting concepts as applied to a personal service enterprise. Students work problems involving the accounting cycle, utilizing journals and ledgers and the preparation of financial statements. The course includes accounting methods for payrolls, merchandise, and notes.

## Prerequisite: BUS 128

Study of basic accounting concepts as applied to a merchandising firm. Includes a study of installment and consignment sales, accounting for purchases and sales, inventories, long-term assets and owner's equity, and year-end procedures to be followed in merchandising and wholesale businesses.
BUS 134 Personal Grooming $\quad 3 \quad 0 \quad 0 \quad 0$

Designed to help students recognize the importance of physical, intellectual, social, and emotional dimensions of personality. Emphasis is placed on poise, grooming, and methods of personal improvement.

| BUS | 150 | Ten-Key Adding Machine | 0 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Training in the techniques, processes, operations, and applications of the ten-key adding machine. Offered only for students not taking BUS 110 or BUS 117 for graduation or elective.

| BUS | 151 | Full-Key Adding Machine | 0 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Training in the techniques, processes, operations, and applications of the full-key adding machine. Offered only for students not taking BUS 110 or BUS 117 for graduation or elective.

|  |  |  | $c$ | Clinical/ Credit |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| BUS | 152 | Electronic Printing Calculator | 0 | 2 | 0 | 1 |

Training in the techniques processes, operations, and application of the electronic printing calculator. Offered only for students not taking BUS 110 or BUS 117 for graduation or elective.

BUS 154 Cash Register $\begin{array}{lllll}0 & 2 & 0 & 1\end{array}$
Training in the techniques. processes, and operation of the cash register to a level of proficiency of ringing up one item every three seconds. Offered only for students not taking BUS 231 for graduation or elective.

## $\begin{array}{lllllll}\text { BUS } & 158 & \text { Applications in Billing Systems } & 0 & 2 & 0 & 1\end{array}$

Introduction to the fundamentals of mathematics in business and basic accounting procedures as necessary to the operation of an electronic billing system.

| BUS | 160 | Introduction to Magnetic Tape <br> Selectric Typewriter | $\mathbf{0}$ | $\mathbf{2}$ | $\mathbf{0}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: BUS 102
Introduction to the functions and principles of the operation of the IBM MTST, Model VI. Emphasis is placed on the principle of recording material on a magnetic tape. The course covers recording, adjusting, and playing back recorded material.

| BUS | 161 | Applications of Magnetic Tape <br> Selectric Typewriter | $\mathbf{0}$ | $\mathbf{2}$ | $\mathbf{0}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: BUS 160
Emphasis is placed on recording various business forms on tape and playing back recorded copies of letters, manuscripts, and statistical typing.

BUS 162 \begin{tabular}{lllllll}
Applications of Magnetic Tape <br>
Selectric Typewriter

$\quad$

\& 0 \& 2 \& 0 \& 1 \& 173
\end{tabular}

Prerequisite: BUS 161
Recording of form letters. Emphasis on revision function of MTST with practice on revising previously recorded material.

| BUS | 163 | Application of Magnetic Tape <br> Selectric Typewriter | 0 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: BUS 104
Corequisite: BUS 164
Introduces legal document formating and the application of lega! documentation. Emphasizes the recording of legal forms on magnetic tape and the manual insertion of data on the playback copy.

BUS 164 Magnetic Tape Selectric Typewriter | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Prerequisite: BUS 102

Introduction to the functions and principles of the operation of the IBM MTST, Model VI. Emphasis is placed on the principle of recording material on a magnetic tape and playing back recorded copies of letters, manuscripts, and statistical typing, and on the revision function of the MTST with practice on revision previously recorded material.

| BUS 165 | Introduction to Business | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Survey of the business world with particular attention to the structure of various types of business organizations, methods of financing, internal organization, management, functions of business and relationships in society, and current problems.

## BUS 166 Business Law I $\quad 3 \quad 0 \quad 0 \quad 0 \quad 3$

Study of the law as it applies to ordinary business transactions, including the law of contracts, agency and employment, and commercial paper. Exposure to legal problems frequently arising in business and social life.

## BUS 167 Business Law II <br> 30 <br> 0 <br> 3

Continuation of BUS 166. Includes the law of personal property and bailments, sales, insurance, and torts.

| BUS | Administrative Medical Office <br> Assistant Procedures | 3 | 0 | 0 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |

Provides adequate training for the assistant to be efficient in the medical office. Emphasis is placed on medical ethics and law; receptionist's duties; telephone techniques; mail processing procedures; records management billing, collecting, and banking procedures; and accident insurance.
$\begin{array}{lllllll}\text { BUS } & 182 \mathrm{M} & \text { Clinical Assistant Procedures } & 3 & 0 & 0 & 3\end{array}$
Continuation of medical office training covering a vast area of clinical techniques, such as microbiology, pharmacology, diagnostic laboratory procedures, first aid and medical emergencies, and administration of medications. Further study in assisting with physical therapy, minor surgery, etc.
BUS 183L Legal Typing Practice $\quad 3 \quad 0 \quad 0 \quad 0 \quad 3$

Prerequisite: BUS 103
Training in the functions, operations, and duties performed in a legal office. The course includes typing legal documents, reviewing general information about tasks assigned, following established procedures, performing general office routine, and learning the responsibilities of a legal secretary.

## BUS 183M Medical Typing Practice $\quad 2 \quad 3 \quad 3 \quad 0 \quad 3$

Training in the functions, operations, and duties performed in a medical office. Technical material acquaints the prospective medical assistant with commonly used medical vocabulary and procedures.

## BUS 184M Terminology and Vocabulary: Medical I <br> 300

Introduction to the study of the structure of medical words and terms. Emphasis is placed on spelling and defining commonly-used prefixes, suffixes, root words, and their combining forms.

Continuation of the study of medical words and terms with emphasis on words as they pertain to anatomy, physiology, diseases, operations, tumors, drugs, and related descriptive terms.

|  |  |  | Class | Lab | Clinical/ Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS | 186M | Terminology and Vocabulary: | 3 | 0 | 0 | 3 |
|  |  | Medical III |  |  |  |  |

Continuation of BUS 185M with additional study emphasizing the various systems of the body.

| BUS | $\mathbf{1 8 7 M}$Terminology and Vocabulary: <br> Medical IV | 3 | 0 | 0 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |

Prerequisites: BUS 184M, 185M, 186M
This course is a culmination of the three previous courses of medical terminology. Its value lies in the extensive coverage of surgical instruments, surgical procedures, study of the more common diseases and anomalies, etc., that are such an essential part of medical reports. Spelling and pronunciation are emphasized.

| BUS | 188 | Medical Transcription I | 4 | 2 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Machine transcription from cassette recordings produced by the American Medical Record Association of materials routinely transcribed in a medical office. Units include history and physical and radiology, operation, pathology, and autopsy reports and discharge summaries.

| BUS | 189 | Medical Transcription II | 4 | 2 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Continuation of BUS 188 with units containing work in the following areas: psychiatry, pediatrics, obstetrics and gynecology, corrective surgery, and the endocrine, respiratory, genitourinary, gastrointestinal, cardiovascular, and neurological systems.

| BUS | 191 | Electronic Keyboarding | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Corequisite: BUS 104 or permission from instructor
This course is designed to give the student intensive training on the IBM Electronic 75 Typewriter through programmed instruction.

| BUS | 192 | Word Processing Applications | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: BUS 104, 191, or permission from instructor
This course is designed to give the student a basic understanding of the operation of the IBM Displaywriter system through programmed instruction and diskettes.

| BUS | 205 | Production Typewriting | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: BUS 258
Development of individual production rates. Techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study.

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 213 | 5 | 0 | 0 | 0 | 5 |

Prerequisite: BUS 114
Emphasis on refinement of machine transcription skills and developing proficiency in producing mailable copy.

## BUS 214A Clinical Experience <br> 0 <br> 18 <br> $0 \quad 6$

Prerequisites: BUS 183M, 185M, 188, 189
Introduction through on-the-job experience to practice of medical transcription, using tapes of actual medical records in a physician's office, clinic, or hospital record room.

| BUS | $214 B$ | Medical Transcriber Seminar | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of personal responsibilities as a medical transcriber, including employeeemployer relations and evaluation of clinical experience. Medical transcription experienced by the members of the class in the various medical specialties will also be reviewed.

| BUS 215 | Office Application | 0 | 10 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: BUS 205, 117
Emphasis on work experience and an opportunity for the practical application of the skills and knowledge previously learned. Student assigned to a commercial firm for general office work as required by the cooperating firm.

## $\begin{array}{llllll}\text { BUS } 216 & 5 & 0 & 0 & 5\end{array}$

Prerequisites: BUS 113 or BUS 107, BUS 258
Designed to acquaint students with the responsibilities encountered by a general office worker during the work day, including receptionist duties, handling the mail, telephone techniques, handling the multi-office switchboard, travel information, telegrams, office records, purchasing supplies, office organization, and scheduling appointments.
$\begin{array}{llllllll}\text { BUS } & 219 & \text { Credit Procedures and Problems } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: ACT 150
Principles and practices in the extension of credit and the collection of accounts. Federal and state laws pertaining to credit extension and to collection are included.

## $\begin{array}{lllllll}\text { BUS } 222 & \text { Intermediate Accounting } & 5 & 0 & 0 & 5\end{array}$

Prerequisite: ACT 152
Intensive review of the accounting cycle, including study of financial statements and closing procedures. Includes a more detailed study of current assets including cash, temporary investments, receivables, and inventories.

## $\begin{array}{lllllll}\text { BUS } 223 & \text { Intermediate Accounting } & 5 & 0 & 0 & 5\end{array}$

Prerequisite: ACT 152
Advanced study of inventories, investments, and plant and intangible assets. Both current and long-term liabilities are examined. Procedural as well as theoretical studies are made.
$\begin{array}{lllllll}\text { BUS } 224 & \text { Intermediate Accounting } & 5 & 0 & 0 & 5\end{array}$
Prerequisite: BUS 223
Study of stockholder's equity accounts. Managerial information provided by earnings and equity per share, statement of changes in financial position, and financial statement analysis.

BUS 225 Cost Accounting
Prerequisite: ACT 152
Nature and purposes of cost accounting. Includes accounting for direct labor, materials, and factory burden; job cost and standard cost principles and procedures; selling and distribution costs; budgets, and executive use of cost figures.

BUS 226 Payroll Accounting $\quad$ Class | Clinical/ | Credit |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |  |
| Hob | 3 | 2 | 0 | 4 |

Prerequisite: ACT 151
An intensive study of Federal and State income tax requirements. Preparation of forms for social security and income withholding payments and unemployment taxes. Comprehensive payroll problem includes accounting for payroll and preparation of tax forms.
BUS 227 Advanced Accounting 500000050
Prerequisite: BUS 224
Study of Professional Code of Ethics and APB Opinions. Application of accounting theory and principle through case studies.

BUS 229 Taxes $3 \quad 2 \quad 0 \quad 4$
Prerequisite: ACT 152
Federal and state income tax preparation. Includes preparation of income tax forms for sole proprietorship, recording partnership income on the individual return, calculation of capital gains, accounting for rental property, and calculation of self-employment taxes.

| BUS | 231 | Sales and Inventory Procedures | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Emphasis on selling procedures, customer relations, marketing and displaying merchandise, use of the cash register, credit card sales, and inventory record-keeping as required for a general sales clerk.
$\begin{array}{llllll}\text { BUS } 232 & \text { Sales Development } & 3 & 0 & 0 & 3\end{array}$
Study of the fundamentals of retail, wholesale, and specialty selling as applied to the sales demonstration.
BUS 233 Personnel Management 3

Study of the personnel department; policies of recruitment, selection, placement, training, and promotion; and employee health and safety.

BUS 235 Business Management | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Study of the application of planning, staffing, controlling, directing, and financing tc decision making.

BUS 239 Marketing $\begin{array}{lllll}5 & 0 & 0 & 5\end{array}$
Survey of the marketing process with a detailed study of functions, policies, and institutions.

BUS 243 Advertising | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- |

Study of advertising appeals, product and market research, media selection, and testing the effectiveness of mass communications.
BUS 247 Business Insurance $\begin{array}{lllll}3 & 0 & 0 & 3\end{array}$
Presentation of the basic principles of various types of insurance.
BUS 258 Speed Typewriting $\quad 2 \quad 3 \quad 0 \quad 3$
Prerequisite: BUS 104
Emphasis on improving typing techniques, including stroke control, accuracy, forced speed building, and retained speed for long periods of typing straight copy.
BUS 259 Office Simulation

|  |  | Clinical/Credit |  |
| :---: | :---: | :---: | :---: |
| Class | Lab | Shop | Hours |
| 2 | 3 | 0 | 3 |

Prerequisite: BUS 216, 258
Culmination of typing skills development involving general clerical duties such as typing invoices, insurance forms, statements of account, form letters, reports, payrolls, purchase orders, and monthly reports. A simulation is used that gives realistic patterns of interaction with coworkers to enable students to learn firsthand the personal traits and human relations skills needed for successful employment.
BUS 268 Auditing Theory $\begin{array}{lllll}3 & 0 & 0 & 3\end{array}$
Study of the audit profession. Stresses professional responsibilities and ethics. An introduction to the audit process, including an overview, methods of obtaining audit evidence, and audit program planning.
BUS 269 Auditing 30003003
Prerequisites: BUS 224, 268
More advanced study of auditing techniques, including statistical sampling, tests of transactions and balances, and evaluation of internal control. The reporting function of auditing is closely examined.

Study of basic management principles as applied to the office as a business service center.

| BUS | 272 | Principles of Supervision | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the responsibilities and duties of a supervisor as related to his supervisors, subordinates, and associates.

| BUS | $290 A$ | Special Problems in Business | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | $290 B$ | Special Problems in Business | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ |
| BUS | 290 C | Special Problems in Business | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ |

Designed for students who want to expand their knowledge and ability in certain areas of business management, accounting, or secretarial skills. The course is structured to meet the specific objectives of each student and is supervised by an appointed member of the staff.

## $\begin{array}{llllllll}\text { BUS } & 1103 & \text { Small Business Operations } & \mathbf{3} & \mathbf{0} & \mathbf{0} & \mathbf{3}\end{array}$

Introduction to the business world; includes problems of small business operations, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

## BUS 1105 Industrial Organizations <br> 3000 <br> 3

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competıtive system and the factors constituting product costs.

## CARPENTRY

CAR 1101 Carpentry
Brief history of carpentry and present trends of the construction industry. Involves operation, care, and safe use of carpenters' handtools and power tools in cutting,

# Clinical/ Credit <br> Class Lab Shop Hours 

shaping, and joining construction materials used by the carpenter. Major topics of study include theoretical and practical applications involving materials and methods of construction, building layout, preparation of site, footings and foundation wall construction, and form construction and erection.

## CAR 1102 Carpentry: Millwork and Cabinetmaking <br> 3015 <br> 8

Prerequisites: CAR 1101, DFT 1110
Cabinetmaking and millwork as performed by the general carpenter for building construction. Use of shop tools and equipment emphasized in learning methods of construction of millwork and cabinetry. Practical applications include measuring, layout, and construction of base and wall cabinets, built-in desks, door and window frames, stairs, and interior and exterior cornices and trim. Materials and finishes are also studied.
$\begin{array}{lllllll}\text { CAR } 1103 & \text { Carpentry: Framing } & 3 & 0 & 15 & 8\end{array}$
Prerequisites: CAR 1101, DFT 1111
Principles and practices of frame construction beginning with the foundation sills and including floor joists, subfloors, wall studs, ceiling joists, rafters, bridging, bracing, sheathing, and interior wall partitions. Roof construction includes the layout and construction methods of common types of roof using standard after construction, truss construction, and post and beam construction. Application and selection of sheathing and roofing is included. Consideration is given to coordination of carpentry work with installation of electrical, air conditioning, heating, plumbing, and mechanical equipment.

CAR 1104 Carpentry: Finishing I $\begin{array}{lllll} & 3 & 0 & 18 & 9\end{array}$
Prerequisites: CAR 1103, DFT 1111
Emphasis on exterior and interior trims and finishes. Included are materials and methods used in finishing carpentry such as exterior cornices, door and wiridow trims, interior flooring, door and window facings, moldings, and cornice construction; installation of hardware; and installation of built-in equipment and cabinets.
$\begin{array}{lllllll}\text { CAR } & 1113 & \text { Carpentry: Estimating } & 3 & 0 & 3 & 4\end{array}$
Prerequisites: DFT 1111, MAT 1112
Practical course in quantity "take off" from prints of jobs performed by the carpenter; figuring the quantities of materials needed and costs of building various components and structures.

CAR 1114 Building Codes 30003
Prerequisite: CAR 1103
Corequisite: CAR 1104
Study of building codes and the minimum requirements for local, county, and state construction regulations. Attention is given to safety, sanitation, mechanical equipment, and materials, and to a review of the minimum property requirements of the Federal Housing Administration and the North Carolina State Code.

## COMMERCIAL ART

| CAT 101 Advertising Principles | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Comprehensive survey of the history and development of advertising including a

Clinical/ Credit<br>Class Lab Shop Hours

discussion of its economic and social values. Introduction to advertising media and current publications in the field.

| CAT 102 Drawing I | 1 | 4 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Emphasis on basic principles and fundamentals of drawing. Includes application of these basic techniques in problems in perspective drawing and drawing from nature.

CAT 103 Drawing II 1 |  | 4 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisite: CAT 102
Course consisting of a series of problems in which students explore color and advanced wet and dry media.

| CAT 104 Drawing III | 1 | 4 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: CAT 103
Course consisting of a series of problems concentrating on graphic interpretation of still-life, landscape, and figure.

CAT 107 Drafting for Art | 1 | 3 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Introduction to the field of drafting. Includes a study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are the use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric instruction, orthographic instruction, drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective drawing are introduced.

| CAT | 108 | Drafting for Art | 1 | 3 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: CAT 107
Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices approved by the American Standards Association will also be included. Introduction is given to the intersections and developments of various types of geometrical objects.
$\begin{array}{lllllll}\text { CAT } 109 & \text { Drawing IV } & 1 & 4 & 0 & 3\end{array}$
Course consisting of a series of problems involving expression interpretation of graphic form; and stressing sophistication of concept and execution.

CAT 110 Art History to $\mathbf{1 3 0 0} 3$| 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Brief survey of art and its development in western civilization with emphasis on the development of art forms of expression to thirteen-hundred.
CAT 111 Art History Since 1300 3 0

A brief survey of art and its development in western civilization with emphasis on the development of art forms in expression from thirteen-hundred to the modern era.

CAT 120 Illustration Techniques
1
4
0
3
Course introducing various media used in creating dynamic visual presentations, the object of which is to stimulate the student's awareness of alternative means of expression.

|  |  |  | Class | Lab | Clinical/ Shop | Cred <br> Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAT | 121 | Design I | 3 | 6 | 0 |  |

Introduction to basic design and its elements and concepts. Deals with problems in balance, value, line, texture, and shape. Work with basic tools and materials to explore some of the design possibilities of the two-dimensional format included.

| CAT 122 Design II | 3 | 6 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: CAT 121 or portfolio
Continuation of Design I with emphasis on the fundamentals and theories of color and its application and design potential.

## CAT 123 Layout and Design I <br> 260 <br> 5

Prerequisites: CAT 107, 108, 121, 122
Introduction to the basic techniques of layout and graphic design including paste-up, mechanicals, typography, and production.

## CAT 210 Production Techniques <br> 140 <br> 3

Introduction to production techniques. Includes the exploration of mechanical type and its formation and uses. Airbrush techniques and the commercial uses of silkscreen printing are also included. Each student should acquire a working knowledge of each medium through laboratory exercises provided.

| CAT | 212 | Advertising Illustration | 1 | 4 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introduction to the use of the illustration in advertising. Students will explore the uses of media and illustration styles.

## $\begin{array}{lllllll}\text { CAT } & 213 & \text { Advertising Illustration } & 1 & 4 & 0 & 3\end{array}$

Prerequisite: CAT 212
Advanced problems in advertising illustration with emphasis on originality and the readiness of each student to explore assigned tasks and problems.
$\begin{array}{lllllll}\text { CAT } & -214 & \text { Type and Letter Form Design } & 1 & 4 & 0 & 3\end{array}$
Includes hand exercises with the pencil, pen point, and lettering brush as well as mechanical procedures and laboratory exercises to acquire knowledge of availability of type and its usage.

| CAT 218 | Photomechanical Techniques | 2 | 6 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Advanced darkroom techniques concerning both tonal and graphic arts photography. Students explore means of producing finished photo art work for client presentation.

| CAT 224 | Layout and Design II | 3 | 6 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: CAT 123
Introduction to intermediate layout and design techniques for offset printing, including the preparation of camera-ready art work. Laboratory problems include an introduction to the graphic art darkroom procedures necessary for offset printing and an introduction to the offset press operation.

| CAT 225 | Graphic Design I | 3 | 6 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Study of advanced problems in layout and design techniques and advanced darkroom procedures necessary for offset production. Laboratory exercises include multicolor offset production problems.

| CAT 226 | Graphic Design II | 3 | 6 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Includes use of simulated professional working conditions in utilizing advanced layout and design techniques for printing. Students will explore a variety of problems and present solutions for general class critique and discussion.

## $\begin{array}{lllllll}\text { CAT } 235 & \text { Portfolio Development } & 1 & 4 & 0 & 3\end{array}$

Students become familiar with specific areas of interest and prepare personal portfolios for presentation to prospective employers.

## $\begin{array}{cllllll}\text { CAT } 241 & \text { Painting: Water Color } & 0 & 6 & 0 & 3\end{array}$

Introduction to the methods of water-color painting. The fluidity of the medium, dry brush effects, and the use of tools and instruments of painting are included. Emphasis will be placed on the integrity of the medium.

## $\begin{array}{lllllll}\text { CAT } 242 & \text { Drawing: Pastels } & 1 & 4 & 0 & 3\end{array}$

Introduction to techniques of pastels, including experimenting with application of chalk to various papers. The use of tools of the craft, methods of applying chalk to the paper surface, and utilizing the paper itself as a moving force in the medium are also included.
$\begin{array}{lllllll}\text { CAT } & 244 & \text { Fashion Illustration } & 1 & 4 & 0 & 3\end{array}$
Study of the clothed figure, with attention to the functional relationship of fashion design to the human form and to the study of draped fabric. Graphic interpretations of a live model in gesture and rendering fabric effects is emphasized.

## $\begin{array}{ccccccc}\text { CAT } 245 & \text { Painting: Water Color II } & 0 & 6 & 0 & 3\end{array}$

The field of illustration will be explored using water color as a medium. Special attention will be given to the organization of forms, the many aspects of color, the application of paint as texture and light, and the special effects of various instruments. Work will be done from magazine cutout collages and from actual on-location field trips.

## CAT 250 Special Problems in Commercial Art

 $\begin{array}{llllll}\text { and Graphic Design } & 1 & 4 & 0 & 3\end{array}$Designed for students who wish to expand their knowledge and ability in particular areas of interest. Permission to enroll must be obtained from department chairman.

CAT 251 Special Problems in Commercial Art $\begin{array}{lllll}\text { and Graphic Design } & 3 & 6 & 0 & 6\end{array}$
Course designed for the exceptional student who wishes to develop a particular project in a specific area of interest. Permission to enroll must be obtained from department chairman.

## CHEMISTRY

CHM 101 Chemistry $4 \quad 2$

0
Review of the physical and chemical properties of substances; chemical changes; elements, compounds, and gases; chemical combinations; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions; electrochemistry, electrolytes, and electrolysis; and application of chemistry to industry.

|  |  |  | Clinical/ Credit |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| CHM | 102 | Introduction to General Chemistry | 4 | 2 | 0 | 5 |

An introduction to environmental chemistry. The course will cover the relationship of chemistry to man and his environment. Topcs studied include environmental measurements, atomic theory, the nature of chemical bonds, the structure of matter, molecular motion, and chemical reactions. Practical applications will be emphasized using class demonstrations and labs.
$\begin{array}{lllllll}\text { CHM } & 103 & \text { General Chemistry II } & 4 & 2 & 0 & 5\end{array}$
Prerequisite: CHM 102
A continuation of CHM 102 including practical applications to environmental problems. Topics covered include inorganic nomenclature, gas laws and properties, the liquid state, solutions and concentration, chemical equilibrium acids, bases, and heavy metals. Demonstrations and labs will be utilized.
$\begin{array}{lllllll}\text { CHM } & 104 & \text { General Chemistry III } & 4 & 2 & 0 & 5\end{array}$
Prerequisites: CHM 102, 103
Continuation of CHM 103 beginning with an introduction to organic and biochemistry. This will be followed by advanced topics in applied chemistry including: water and wastewater chemistry, chemical analysis of air and water samples, instrumental methods of air and water analysis.
$\begin{array}{lllllll}\text { CHM } & 106 & \text { Organic Chemistry } & 4 & 2 & 0 & 5\end{array}$
Study of the general principles and theories of organic chemistry and the preparation, formulas, and properties of the most important organic compounds, with a brief description of synthetic compounds of commercial value; vitamins, antibiotics, hormones, and pesticides are included.
$\begin{array}{lllllll}\text { CHM } & 110 & \text { Chemistry for Nurses } & 2 & 2 & 0 & 3\end{array}$
A survey of general, organic, and biological chemistry with emphasis placed on the aspects of chemistry that apply to physiological and biochemical processes.

## CIVIL ENGINEERING

| CIV 101 | Surveying | 2 | 0 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: MAT 102, ARC 107
Study of the theory and practice of plane surveying, including taping, differential and profile leveling, cross sections, earthwork computations, transit stadia, and transit tape surveys. Layout of footings, floor levels, site work, and mapping included.
CIV 102 Surveying $\quad 2 \quad 6 \quad 0 \quad 0 \quad 4$

Triangulation of ordinary precision, use of plane tablet, calculation of areas of land, land surveying, topographic surveys, and mapping are included in this course.

| CIV | 103 | Surveying | 2 | 6 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Includes a study of route surveys by ground and aerial methods; simple, compound, reverse, parabolic, and spiral curves; geometric design of highways; and highway surveys and plans, including mass diagrams.

CIV 105 | Architectural Materials | Class | Lab | Clinical/Credit |
| :---: | :---: | :---: | :---: | :---: |
| Shop |  |  |  | Hours

Materials used in the construction of architectural structures are studied. Field trips to construction sites and a study of manufacturers' specifications for materials and of properties and standard sizes of structural materials and construction techniques are included.

CIV 106 Architectural Materials
and Methods II $3 \quad 3 \quad 0 \quad 4$
Prerequisite: CIV 105
Study of building materials and construction methods for commercial buildings.

## $\begin{array}{lllllll}\text { CIV } & 110 & \text { Surveyor Practices } & 1 & 0 & 0 & 1\end{array}$

Study of the legal principles of surveys and resurveys, including boundary control and interpretation of deed descriptions. Legal, judicial, and historical aspects of land surveying also studied.

| CIV 114 | Statics | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 102
Study of forces, resultants, and types of force systems; moments; equilibrium of coplanar forces for analytical and graphic methods; stresses and reactions in simple structures; equilibrium of forces in space; and center of gravity, centroids, moment of inertia, and hydrostatic load analysis.

## $\begin{array}{llllll}\text { CIV } 204 & \text { Surveying } & 2 & 0 & 6 & 4\end{array}$

Study of aerial photogrammetry, applications of aerial surveys, building and road construction surveying, lines and grades for foundation layout, building construction bridge layout, and sewer and pipe line surveys.

CIV 216 Strength of Materials
320
Prerequisites: CIV 114, MAT 103
Study of fundamental stress and strain relationship; shear and bending moments; stresses and deflections in beams and columns. Design of members also included.

Prerequisite: CIV 216
Analysis and design of reinforced concrete beams, floor systems, columns, use of CRSI Design Handbook, introduction to ultimate strength design, and principles of prestressed and precast concrete are studied. Field inspection trips are included.
$\begin{array}{llllllll}\text { CIV } 223 & \text { Codes, Contracts, and Specifications } & 2 & 0 & 0 & 2\end{array}$ Study of the basic principles and methods significant in contract relationships; legal considerations in construction work; and the National Building Code and local building codes. Interpreting and outlining specifications also included.

## CRIMINAL JUSTICE

Designed to provide an overview of the criminal justice system including its philosophy, objectives, and legal limitations in a democratic society.

CJC 102 Legal Research I Class | Clinical/ | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lhop |  | Hours

Methods of legal research, proper citation of authority, acquaintance with legal treaties, texts, reports, and the use of Shepard's Citations.

CJC 109 Interviewing | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: Permission of instructor or coordinator
Designed to provide a knowledge of the fundamental techniques employed in interviewing; introduction to interrogation and overview of sources of information available to investigators.
CJC 112 Motor Vehicle Laws
300
3

Study of the traffic enforcement codes with primary emphasis on North Carolina law.
CJC 113 Corrections Law
300
3

Study of the laws which deal with the rights, custody, and control of individuals under the supervision of the judicial system.
CJC 115 Criminal Law I
300
3

Study of criminal laws dealing with offenses against the person. Emphasis is placed on North Carolina law.

| CJ | 116 | Criminal Law II | 3 | 0 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Prerequisite: CJC 115 or permission of instructor or coordinator
Study of criminal laws dealing with offenses against property. Emphasis placed on North Carolina law.
CJC 120 Principles of Organization
30
0
3

Introduction to the principles of organization and administration with emphasis upon theories and techniques utilized in public agencies.

## CJC $\quad \mathbf{1 2 1}$ Personnel Supervision <br> 300 <br> 3

Prerequisite: CJC 120 or permission of instructor or coordinator
Study of the principles and theories employed in modern personnel supervision.

CJC 125 Criminal Procedure | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Designed to provide the student with a knowledge of legal aspects of criminal procedures from the initial investigation through the final appeal.

CJC 151, 152, 153, 154, 155, 156 Readings in $\begin{array}{lllll}\text { Criminal Justice } & \mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{1}\end{array}$

Designed for students who wish to specialize or expand their knowledge in certain areas of criminal justice. Under the supervision of police science faculty members, the student studies materials relative to concepts in criminal justice and writes critical analyses. Times for students' independent study and individual conferences are allotted with the supervising instructor.

CJC 204 Evidence Photography | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Study of photographic principles and their application to evidence photography. Students develop skills in photographic techniques and the use of various types of equipment through lab practice.

|  |  | Clinical/ <br> Clasedit |  |
| :---: | :---: | :---: | :---: |
| 3 | Lab | Shop | Hours |
| 3 | 0 | 0 | 3 |

## CJC 205 Evidence

3
0 3

Instruction covers the legal aspects of the various kinds and degrees of evidence and the rules governing the admissibility of evidence in court.
$\begin{array}{lllllll}\text { CJC } 210 & \text { Criminal Investigation } & 4 & 2 & 0 & 5\end{array}$
Prerequisites: CJC 204, 211
Course designed to instruct the student in the fundamental concepts of investigation.

| CJC 211 | Criminalistics | 4 | 2 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: CHM 101
General survey of the methods and techniques employed in modern scientific investigations with emphasis on evidence which is compared by physical means.
$\begin{array}{llllll}\text { CJC } 235 & \text { Forensic Science } & 3 & 2 & 0 & 4\end{array}$
Prerequisite: CHM 101
Survey of the physical sciences and their application to the field of investigation with emphasis on evidence which is compared chemically.

## COOPERATIVE EDUCATION

COE 100 Student, Career, and Society $\quad 3 \quad 0 \quad 0 \quad 3$

Prerequisite: One quarter as a full-time student and acceptance into the Cooperative Education Program
Introduction and orientation to experiential education and to broader participation in society. Attention is given to responsibilities and opportunities associated with career improvement and to preparation for employment in the business, industrial, and professional community. Application of theory to the actual work situation is emphasized. Designed to help students in vocational, technical, and college transfer programs make the transition from the campus to the world of work.

| COE | $101 \text { - A, B, C, D* }$ | Cooperative Education Field Experience | 0 | 10-40 | 0 | 1-4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COE | 102 - A, B, C, D |  |  |  |  |  |
| COE | 103 - A, B, C, D |  |  |  |  |  |
| COE | 104 - A, B, C, D |  |  |  |  |  |
| COE | 105 - A, B, C, D |  |  |  |  |  |
| COE | 106 - A, B, C, D |  |  |  |  |  |

Through Cooperative Education, students work in part-time or full-time positions related to their programs of study or career interests and for employers selected and/or approved by the institution. Students are supervised by a faculty member or cooperative education supervisor from the institution. Normal credit hours for the field work of a cooperative program are determined by dividing the average number of hours worked per week by ten and rounding to the nearest whole number. Generally, a student may receive a maximum of four credit hours, during any one quarter and a maximum of nine credit hours toward degree or diploma requirements. Those enrolled in the associate in arts degree programs can earn up to 6 credit hours of add-on credit.
*A (1), B (2), C (3), D (4) indicates credit hours possible.

## COSMETOLOGY

## COS 1101 Cosmetology I

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 0 | 0 | 40 | 12 |

Includes a study of professional ethics, grooming and personality development, sterilization, sanitation, first aid, and bacteriology. The practical work is devoted to fingerwaving, pin curling, roller curling, manicuring, marcelling, hair cutting, and hair relaxing.

## $\begin{array}{lllllll}\text { COS } 1102 \text { Cosmetology II } & 0 & 0 & 40 & 12\end{array}$

Study of the theory and practical application of permanent waving (cold and heat wave), tinting and bleaching, anatomy, facials, and scalp treatments.

## COS 1103 Cosmetology III <br> $0 \quad 0 \quad 40$ <br> 12

Study of the theory and practical application of hair styling and wig care; disorders of skin, nails, and hair; electricity; chemistry; and operational management.
COS 1104 Cosmetology IV
$0 \quad 0 \quad 40$
12

Study of the theory and practical application of advanced hair styling, operational management, and salesmanship.

## CORRECTIONAL SCIENCE

CSC 201 Marriage and the Family $\quad 3 \quad 0 \quad 0 \quad 3$

Study of courtship, engagement, marriage, parenthood, and family living in contemporary American society. Emphasis is placed on social, economic, sexual, and legal aspects of family living and the adjustment of individuals to their respective roles in the family.

## CSC <br> 203 Survey of Corrections <br> 3 <br> $0 \quad 0 \quad 3$

Introduction and overview of fundamental processes, trends, and practices of juvenile and adult probation, institutional treatment, parole, and contemporary communitybased correctional programs, both public and private. Review of the history and philosophy of corrections, with emphasis on the constitutional rights of offenders included.

## CSC 207 Confinement Facilities

$\begin{array}{lllll}\text { Administration } & 3 & 0 & 0 & 3\end{array}$
Supervision and administration of confinement facilities, involving techniques of inmate supervision, security, medical care of prisoners, food preparation, sanitation and various legal aspects controlling detention facilities, correctional institutions, and jails.

| CSC | 213 | Dynamics of Substance Abuse | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introduction to the problem of substance abuse (alcohol, drugs, narcotics) in society. Designed to equip criminal justice, social service, and other human service workers with increased knowledge concerning history and classification of drugs of abuse; social impact and physical and psychological results of their abuse; and the various facilities and treatment modalities being used.

Explores the different avenues of rehabilitation; new and innovative techniques of rehabilitation emphasized as they relate to successful methods.

CSC
226 Administration and Interpretation of Tests 30

3
Study of the rationale for group and individual testing. Includes the administration as well as the uses of tests of intelligence, interest, and achievement in educational and career planning. Practicum experience closely correlated with classroom activities so that students may apply knowledge and skills to actual on-the-job learning situations.

## CSC 229 Career Information <br> $3 \quad 2 \quad 0$ <br> 4

Study of the career and educational information available to aid students in career decision-making. Includes a study of the world of work; sources of occupational information; and sociological and psychological factors which influence career planning. Practicum experience correlated with classroom activities so that students apply knowledge and skills to actual on-the-job learning situations.

| CSC | 234 | Community-Based Corrections | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Exploration of philosophy and programs of juvenile and adult probation supervision, aftercare parole, halfway homes, work and educational release-furlough, as well as executive clemency and interstate compact practices. Dilemma of surveillancecustody/control factors vs. supervision-treatment examined. Introduction to classification of offenders, followed by analysis of possible treatments. Citizen-agency relationships investigated, along with potentials of utilizing citizen volunteer programs.

## DRAFTING

DFT 101 Technical Drafting $\quad 0 \quad 6 \quad 0 \quad 2$

Introduction to the field of drafting. Includes a study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are the use of drafing equipment, lettering, freehand orthographic and pictorial sketching, geometric instruction, orthographic instruction, drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective drawing are introduced.

## $\begin{array}{lllllll}\text { DFT } & 102 & \text { Technical Drafting } & 0 & 6 & 0 & 2\end{array}$

Prerequisite: DFT 101
Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions. Introduction of the graphical analysis of space problems stressed. Problems of practical design elements involving points, lines, planes, and a combination of these elements are studied. Dimensioning practices approved by the American Standards Association are included. Introduction to intersections and developments of various types of geometrical objects.

Interpretation and reading of blueprints. Information on the basic principles of the blueprint, including lines, dimensioning procedures, and notes.

DFT 105 Blueprint Reading and Sketching $\quad$|  |  |  | Clinical/ | Credit |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 3 | 0 | 0 | 3 |

Prerequisite: DFT 104
Further practice in interpretation of blueprints as they are used in industry: study of prints supplied by industry, making plans of operation, introduction to drafting room procedures, and sketching as a means of passing on ideas.

## DFT 106 Blueprint Reading and Technical

 $\begin{array}{llllll}\text { Sketching } & 2 & 0 & 0 & 2\end{array}$General course in interpreting and reading blueprints. Information includes the basic principles of the blueprint, lines, views, dimensioning procedures, and notes. Emphasis placed on reading of blueprints common to the building systems. Sketching as a means of passing on ideas and information introduced.

| DFT | 230 | Structural Drafting | 2 | 6 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ARC 220, CIV 105
Concentrated study and drawing of structural plans with emphasis on details and shop drawings of the structural components of buildings including steel, reinforced concrete, and timber structures. Appropriate symbols, conventions, dimensioning practices, and notes used by the draftsman included. Emphasis also on drafting appropriate drawings for fabrication and erection of the structural components.

DFT 235 Codes, Specifications, and Contract Documents 30 4

Prerequisite: ARC 220
Study of building codes and their effect on specifications and drawings. Purpose and writing of specifications and their legal and practical application to working drawings are studied. Contract documents analyzed and studied to determine client-architectcontractor responsibilities, duties, and mutual protection.

| DFT 236 | Construction Estimating and Field <br> Inspecting | 3 | 3 | 0 | 4 | 189 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: DFT 235
Includes interpretation of working drawings for a project; preparation of material and labor quantity surveys from plans and specifications; and approximate and detailed estimates of costs. Students study material take off, labor take off, subcontractors' estimates, overhead costs, and bid and contract procedures. Detailed inspection of the construction by comparing the finished work to the specifications is also included.

## $\begin{array}{lllllll}\text { DFT } & 1104 & \text { Blueprint Reading: Mechanical } & 3 & 0 & 0 & 3\end{array}$

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

## $\begin{array}{lllllll}\text { DFT } & 1105 & \text { Blueprint Reading: Mechanical } & 3 & 0 & 0 & 3\end{array}$

Prerequisite: DFT 1104
Further practice on interpretation of blueprints as they are used in industry, study of prints supplied by industry, making plans of operations, introduction to drafting room procedures, and sketching as a means of passing on ideas.

| DFT | 1106 | Blueprint Reading: Mechanical | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: DFT 1105
Advanced blueprint reading and sketching as related to detail and assembly drawings

## Clinical/ Credit Class Lab Shop Hours

used in machine shops. Interpretation of drawings of complex parts and mechanisms for features of fabrication, construction, and assembly.

## DFT 1110 Blueprint Reading: Building Trades $\begin{array}{llllll}\mathbf{3} & \mathbf{0} & \mathbf{0} & \mathbf{3}\end{array}$

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

## $\begin{array}{llllllll}\text { DFT } & 1111 & \text { Blueprint Reading and Sketching I } & 3 & 0 & 0 & 3\end{array}$

Prerequisite: DFT 1110
Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, walls, elevations, chimneys, fireplaces, arches, and cavity wall construction. Development of proficiency in making threedimensional views and pictorial sketches.
$\begin{array}{llllllll}\text { DFT } & 1112 & \text { Blueprint Reading and Sketching II } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: DFT 1111
Designed io develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls, and various detailed drawings of masonry work.
$\begin{array}{llllllll}\text { DFT } & 1113 & \text { Blueprint Reading and Sketching III } & \mathbf{3} & 0 & 0 & \mathbf{3}\end{array}$
Prerequisite: DFT 1110
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 installations using appropriate symbols and notes according to the applicable codes included.

DFT 1113M Blueprint Reading and Sketching: $\begin{array}{llllll}\text { Masonry } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: DFT 1112
A study of different types of structural designs and details for commercial construction. A study of different construction trades and how each trade relates to the masonry trade.

## DFT 1116 Blueprint Reading: <br> Air Conditioning

1
30
2
Prerequisite: DFT 1104
A specialized course in drafting for the air conditioning, heating, 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 systems.
$\begin{array}{lllllll}\text { DFT } & 1117 & \text { Blueprint Reading: Welding } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: DFT 1104
Study of trade drawings in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications.

DFT 1118 Pattern Development and Sketching \begin{tabular}{ccccccc}

\& \& \& Class \& Lab \& \begin{tabular}{c}
Linical/ <br>
Shop

 \& 

Credit <br>
Hours
\end{tabular} <br>

\& 3 \& 0 \& 0 \& 3
\end{tabular}

Continued study of welding symbols; methods used in layout of sheet steel; sketching of projects; and jigs and holding devices involved in welding. Special emphasis placed on developing pipe and angle layouts by the use of patterns and templates.
DFT 1120 Drafting: Electronic Servicing $\quad 3 \quad 0 \quad 3 \quad 3$

Introduction to the field of drafting; includes a study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are the use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. Principles of isometric, oblique, and perspective drawing introduced.

DFT 1201 Drafting: Mechanical I $\begin{array}{lllll}1 & 3 & 0 & 2\end{array}$
Introduction to drafting room procedures; sketching as a means of passing on ideas, information, and processes; and the use of drafting instruments in the practice of lettering, dimensioning, orthographic projections, and working drawings.

DFT 1202 Drafting: Mechanical II | 1 | 3 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: DFT 1201
Additional instruction and practice in orthographic projections, working drawings, lettering, and dimensioning. Also included is an introduction to sectioning, pictorial drawings, and the use of drawing instruments for the graphical solution of geometrical problems. Emphasis placed on interpretation of shop blueprints to better prepare students for DFT 1105.

## ECONOMICS

ECO 108 Consumer Economics $\quad 3 \quad 0 \quad 0 \quad 3$

Designed to help students use their resources of time, energy, and money. Students given opportunities to build useful skills in buying, managing finances, increasing resources, and understanding the economy.

ECO 150 Economics I $3 \quad 0 \quad 0 \quad 3$
Fundamental principles of microeconomics including the institutions and practices by which people gain a livelihood. Emphasis placed on basic conditions for the market system and how the market process functions in the real world. Supply and demand, price and cost, and current economic problems stressed.

ECO 151 Economics II $\quad 3 \quad 0 \quad 0 \quad 3$
Prerequisite: ECO 150
Continuation of a study of the principles of economics, with emphasis on macro-issues such as national output and income, international trade and finance, and current economic problems.

| ECO | 152 | Economics III | 3 | 0 | 0 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Prerequisite: ECO 151
Continuation of the study of basic economic principles. Emphasis placed on current macro- and microeconomics problems and application of economic principles to short-range forecasting.

ECO 201 Cost-Benefit Analysis $\quad$ Class \begin{tabular}{ccccc}

Llinical/ \& \begin{tabular}{c}
Credit <br>
Shop

 \& 

Hours
\end{tabular} <br>

\& 3 \& 0 \& 0 \& 3
\end{tabular}

Study of methods for project evaluation, including decision criteria, identifying and quantifying cost and benefits, and procedures for performing a cost benefit analysis.

## ELECTRONIC DATA PROCESSING

$\begin{array}{lllllll}\text { *EDP } 111 & \text { Basic Programming } & 2 & 2 & 0 & 3\end{array}$
Introduction to computer programming techniques for beginning students. Introduces the concept of a problem, of a procedure to compute the solution to a problem, and of the BASIC language in which procedures can be implemented.

## $\begin{array}{llllllll}\text { EDP } & 114 & \text { Introduction to Computer Concepts } & \mathbf{3} & \mathbf{0} & \mathbf{0} & \mathbf{3}\end{array}$

Introductory course in computers for students pursuing degree in data processing or desiring a general non-technical knowledge of terminology and concepts. No previous knowledge or experience in data processing required.

## *EDP 115 FORTRAN <br> $\begin{array}{llll}2 & 4 & 0 & 4\end{array}$

Fundamental course in FORTRAN programming. The FORTRAN language structure, statements, and programming methods and techniques are studied. Students develop program logic and write FORTRAN programs for solving sample problems.

| EDP | 116 | Assembly Language I | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of symbolic computer languages with emphasis on a particular example of such a language. Students develop program logic and write programs using Assembly Language to solve appropriate assigned problems.
EDP 117 Assembly Language II $\quad 2 \quad 4 \quad \mathbf{4} \quad 0 \quad 4$

Continuation of Assembly Language to provide students more depth and experience using a symbolic programming language.

## *EDP 118 COBOL I <br> 240 <br> 4

Designed to provide basic training in structured COBOL programming. The COBOL language programming methods and techniques are studied. Students develop program logic and write structured COBOL programs for solving sample problems.

## *EDP 119 COBOL II $\quad 2 \quad 4 \quad 0 \quad 0 \quad 4$

Continuation of training in COBOL programming techniques and methods. Designed to provide students with the opportunity to apply skills learned in COBOL I to typical business applications with emphasis on arrays, tables, control breaks, and disc file organization.

## EDP 150 Introduction to Computers

5000
0
5
Presents the basic concepts of data processing fundamentals, including programming business economics problems for a computer.

[^3]*EDP 211 Applications 1 $\quad$ Class \begin{tabular}{ccccc}

Lab \& \& \begin{tabular}{c}
Clinical/ <br>
Shop

 \& 

Credit <br>
Hours
\end{tabular} <br>

\& 2 \& 4 \& 0 \& 4
\end{tabular}

Designed to provide students with sufficient knowledge in computer methodology to permit the use of computers in business. Emphasis centers on the development of a typical business computer, including complete documentation, using a team programming approach.
*EDP 212 Application II $\begin{array}{lllll} & 2 & 4 & 0 & 4\end{array}$
Emphasizes the preparation and utilization of operations data used in a typical business, case problems involving systems established for collecting the data, and generating information for organizational units. Audit trails enabling the tracing of transactions back to the original source or forward to the first report analyzed. Simulated data used to demonstrate programming techniques required in processing management information. Structure of data files receives major emphasis. Students design, program, and test an entire business application with minimum assistance.

| *EDP 214 Computer Systems I | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Study of computer systems involving concepts of architecture and programming such as channels, interrupts, multiprogramming, job scheduling, file devices, and file organization.

| *EDP 223 | Introduction to RPG II | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of a report generator language appropriate for use with a small computing system. Students develop program logic and write programs to solve appropriately related sample business problems.

| *EDP 224 | RPG II | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: EDP 223
Continuation of EDP 223 with special emphasis on applications and programming procedures of the smaller business.
EDP 230 Internship I $\quad 0 \quad 10 \quad 0 \quad 5$

Cooperative endeavor between Pitt Community College and industry to give students on-the-job training experience. Students work in computer operations for a given company, on location, for a minimum of 10 hours per week.

EDP 231 Internship II | $\mathbf{0}$ | $\mathbf{1 0}$ | $\mathbf{0}$ | 5 |
| :--- | :--- | :--- | :--- | :--- |

Continuation of the on-the-job training begun in EDP 230.
*EDP 232 Communications Control Programming
$2 \quad 2 \quad 0 \quad 3$
Designed to teach the participant how to write telecommunications application programs to run under control of the communications control program (CCP). Also, in order to fully utilize the display format facility of the CCP, students learn the concepts and operation of the information display system.

## EDUCATION

| EDU | 102 | Child Health and Safety | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of environmental influences on the physical and mental health of young children. Emphasis on first aid practices and available community services for children.

| EDU | 103 | Preschool Orientation | 1 | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Supervised learning activities related to policies and procedures used in operating a child development center.

| EDU | 104 | Preschool Observation | 1 | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: EDU 103
Supervised learning activities related to observing children individually and in group activities.

| EDU | 106 | Practicum in Elementary School | 1 | 0 | 15 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Program of supervised practices as an assistant in the education of children ages five to eight.

| EDU | 107 | Practicum in Preschool Experiences | 1 | 0 | 15 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Program of supervised practice in the care and education of preschool children.

| EDU 111 | Language Arts Techniques I | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of language acquisition of young children and its relationship to developing reading skills. Attention given to the various approaches to teaching reading with particular emphasis on the phonic method. Introduction to the multi-media approach to teaching young children. Students have the opportunity to explore all phases of the library, including cataloging, reference materials, and periodicals. Experiences provided in the use of audiovisual equipment and duplicating machines. Experience with a laminating process, making transparencies, placing orders for films, and other visual aids provided while developing science and social studies units of work.

## $\begin{array}{llllllll}\text { EDU } 202 & \text { Discipline Strategies in the Classroom } & 3 & 0 & 0 & 3\end{array}$

Survey of various approaches to discipline. Attention given to the more popular models with practical guides for selecting a positive and personal approach.

Introductory course for those who may work with exceptional children. Examination of the characteristics and problems relating to educating typical children.

Study of ways parents can be involved in child development, of the purposes and values of home visitation, and of the techniques for reporting child's progress to parents. The role of the educational associate in aiding parents in the guidance of the child's development is emphasized.

EDU 212 Language Arts Techniques II $\quad$ Class | Lab | Clinical/ | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shop |  |  | Hours

Designed to introduce and extend fundamental knowledge of the reading process, including an understanding of essential skills and early detection and remediation of possible reading problems.

EDU 224 A, B, C, Seminar-Practicum $\begin{array}{llllll}\text { Elementary School } & 1 & 0 & 15 & 6\end{array}$

Prerequisite: Student must have completed at least five quarters of twelve credit hours each at Pitt Community College and maintained a cumulative grade point average of 2,0 or better.
The seminar-practicum experience involves students with the learning processes in an elementary school. These experiences enable the students to gain exposure in many facets in education as well as to do specialized study in given areas. Through "learning by doing," the student may correlate his knowledge and skills to an actual teaching situation.

EDU 225A, B, C Seminar-Practicum: Preschool $1 \begin{array}{lllll} & 15 & 0 & 15 & 6\end{array}$
The practicum and seminar experience involves students with the learning process in a variety of educational settings. These experiences enable the students to gain exposure to many facets of education as well as to do specialized study in given areas. Through learning by doing, students correlate knowledge and skills to actual teaching situations.
EDU 229 Infant Care 3 0 0

A study of infants, their behavior and development, and the importance of adequate and appropriate care for the newborn and infant.

EDU 230 Preschool Education 5
Study of principles and practices of early childhood education including the types of experiences and facilities which promote optimal development of each child. Guidelines for identifying, planning, organizing, and implementing appropriate programs and facilities are derived through group discussion and individual projects. Field experience provides opportunities to observe children and programs in different preschool facilities.

EDU 231 Creative Activities | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Individual and group exploration of activities and materials for promoting optimal development of children. Designed to develop an appreciation of the need for play and the activities appropriate at various stages of development.
and Supervision 3 0 0

Designed to assist students in establishing policies and procedures for the operation of a center for the daily group care of young children.

EDU 250 Introduction to Education 4 |  | 4 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Study of education as an institution in society. Emphasis is on the educational system in the U. S. including historical, philosophical, sociological, and psychological foundations of American education. Additional topics included are local, state, and Federal organization of education, current issues and innovations in the schools, and teaching as a profession. During scheduled laboratory hours, students complete a minimum period of 16 hours as participants in public school classrooms. Not a practice teaching course.

|  | Class | Lab | Clinical/ Credit <br> Shop |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ENORGY |  |  |  |

Provides an introduction to energy technology with emphasis on the energy crisis, the nature of energy, energy use patterns and forecasts, sources of energy, and the need for energy conservation as one rational approach to the energy crisis.

EGY
109 Mechanical Devices and $\begin{array}{lllll}\text { Building Systems } & 2 & 2 & 0 & 3\end{array}$

A general study of environmental systems and building mechanical systems and structures with emphasis on energy consumption and loss. Heat loss and heat gain calculations will be covered as well as applicable codes and regulations.

EGY 110 Energy Audits and Procedures $\quad 2$|  | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Introductory course in the basics of energy audits and procedures. Emphasis on the practical application of the concepts, the collection of data, and meaningful reporting of the information.

EGY 111 Energy Conservation Techniques $\begin{array}{llllll} & 2 & 2 & 0 & 3\end{array}$
Continuation of EGY 110 with emphasis on the techniques for correcting those energy loss areas found during the audit. Weatherization procedures and application of appropriate materials covered.

| EGY | 112 | Special Projects: Energy | $\mathbf{1}$ | 6 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Special projects assigned to provide students with practical experience in the areas covered by EGY 110 and EGY 111. (Cooperative Education and option 330 hours in lieu of EGY 112).

Fundamentals of solar radiation, transmission, and absorption. Flat plate and focusing collectors, thermal storage, and utilization of solar energy for heating and cooling covered.
EGY 202 Solar Energy Application $\quad 2 \quad 3 \quad 3 \quad 0 \quad 3$

Continuation of EGY 201 with emphasis on the application of the fundamentals to working solar systems. Information essential for sizing, installing, and servicing solar devices covered.

EGY 203 Energy Management and Planning |  | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Basic concepts of an energy management and conservation program. Emphasis on the component parts of the system with specific end-use restrictions and "quick-fix" measures as means of conserving energy.

EGY 205 Alternate Energy Sources $\quad 2 \quad 2 \quad 0 \quad 3$
A study of the advantages, disadvantages, and applications of various alternate energy sources including alcohol, wind, hydrogen, methane, and small scale hydroelectric systems. Emphasis will be on the possible utilization of these alternate sources as replacements for conventional fuels.
ELECTRICITY
ELC $\quad \mathbf{1 0 1} \quad$ Fundamentals of Electricity
I

| ELC | 102 | Fundamentals of Electricity II | 5 | 4 | 0 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 101
Study of series and parallel resonant-circuit analysis, resonant and non-resonant transformer analysis, basic diode power analysis, and an introduction to electro-mechanical devices.
ELC 112 Alternating and Direct Current $\quad 2 \quad 6 \quad 6 \quad 0 \quad 4$

Study of the electrical structure of matter; the electron theory; and the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. Ohm's Law and Kirchoff's Law and the relationships and applications of electricity to modern industrial machinery are included.

| ELC | 113 | Alternating Current and Direct <br> Current, Machines and Controls | 2 | 6 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Prerequisite: ELC 112

Study of the fundamental concepts in single and polyphase alternating current circuits, voltages, current, power measurements, transformers, and motors. Instruction given in the use of electrical test instruments in circuit analysis. Includes a study of the basic concepts of AC and DC machines; simple system controls; and an introduction to the types of controls used in small appliances, including thermostats and timers or sequencing switches.

| ELC | 119 | Industrial Electrical Controls and <br> Systems | 2 | 6 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 113
Fundamental concepts and applications of electrical, pneumatic, and hydraulic control systems. Controls, protecting devices, and industrial applications emphasized.

ELC 121 Electrical Troubleshooting | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ELC 112, 113
Utilization of all service tools, instruments, and equipment necessary to analyze all aspects of service and repair, using the procedures employed in service and repair in industry. Students expected to demonstrate ability and initiative in the troubleshooting problems presented.

ELC 210 Rotating Devices $\quad 2 \quad 2$|  | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisite: ELC 102, PHY 102
Introduction to electrical machinery. Includes an analysis of AC and DC motor and generator principles, synchros and servomechanisms, and alternators and dynamotors. Basic theory, operation, and maintenance of these devices and systems emphasized.

## ELC 1102 Applied Electricity

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 3 | 3 | 0 | 4 |

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 troubleshooting 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.

## $\begin{array}{llllllll}\text { ELC } & 1112 & \text { Direct and Alternating Current } & 5 & 0 & 12 & 9\end{array}$

Study of the electrical structure of matter and electron theory, and the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. Includes an analysis of direct current circuits by Ohm's Law and Kirchoff's Law and a study of the sources of direct current voltage potentials; fundamental concepts of alternating current flow, reactance, impedence, phase angle, power, and resonance; and an analysis of alternating current circuits.
$\begin{array}{llllllll}\text { ELC } & \text { 1112A Direct Current Theory and Pracitce } & 5 & 0 & 15 & 10\end{array}$
Study of the structure of matter and the electron theory; the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. Includes an analysis of direct current circuits by Ohm's Law and sources of direct current potentials.

| ELC | 1112B Alternating Current Theory and | 5 | 0 | 15 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Practice |  |  |  |  |  |

Study of the fundamental concepts of alternating current, including the generation of sine waves and other non-sinusoidal waveforms, reactance, impedance, power, resonance, and alternating current circuit analysis.

| ELC | 1113 | Alternating Current and Direct | 5 | 0 | 12 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 1112
Study of the fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction is given to the use of electrical test instruments in circuit analysis. Includes a study of the basic concepts of AC and DC machines and simple system controls and an introduction to the types of controls used in small appliances, including thermostats and timers or sequencing switches.

## ELC 1114 Electrical Safety <br> $\begin{array}{llll}3 & 0 & 0 & 3\end{array}$

Emphasis on the use of electrical test equipment to insure job safety and to prevent shock. Appropriate first-aid techniques for treating shock victims also included.

| ELC | 1124 | Residential Wiring | 5 | 0 | 9 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: DFT 1113
Study of the fundamentals of residential wiring, including blueprint reading, planning, layout, and installation of wiring in residential applications such as services, switchboards, lighting, fusing, wire sizes, branch circuits, and conduits. Also includes application of National Electric Code Regulations in actual building mockups.

Clinical/ Credit<br>Class Lab Shop Hours

plexes, with emphasis on blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals of commercial and industrial wiring through practical experience in wiring, conduit preparation, and installation of simple systems.

## ELECTRONICS

ELN 100 Introduction to Electronics $\quad 3 \quad 1$| $\mathbf{3}$ | $\mathbf{2}$ | 0 | 4 |
| :--- | :--- | :--- | :--- |

Introduction to electronics principles and laboratory techniques. The care and proper use of laboratory equipment is emphasized. Techniques of recording and use of laboratory data are taught.

| ELN | 101 | Electronic Instruments and <br> Measurements | 1 | 4 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 102
Study of basic electronic instruments and theories of operation, functions, tolerances, and calibration of both service and laboratory instruments. Laboratory experiences provide opportunities for application of each instrument studied.
ELN 105 Control Devices $\quad 5 \quad 4 \quad 4 \quad 0 \quad 7$

Prerequisite: ELC 102
Study of the electrical characteristics of vacuum tubes and transistors with basic parameters and applications of each type of device to the three-terminal, two-port system emphasized.

ELN 110 | Fundamentals of Electricity and | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronics |  |  |  |  |

Basics of AC and DC circuits, including circuit analysis and the use of electrical components and measuring devices. Introduction to electronic devices also included.

ELN $\begin{array}{lllllll}-111 & \text { Electronic Components and Systems } & 2 & 2 & 0 & 3\end{array}$
Introduces the basics of various electromechanical equipment and electronic devices and systems. Provides a working knowledge of selected electromechanical devices, various electronic components, circuits, and control devices.
ELN 201 Microcomputer Concepts $\quad 2 \quad 2 \quad 0 \quad 0$

Introduction to the programming and operation of microcomputers. Topics include computer concepts, applications and use, operations, software, and the elements of basic programming. Emphasis on microcomputer applications for energy conservation.
ELN 202 Microcomputer Hardware $\quad 2 \quad 2 \quad 0 \quad 3$

Designed to develop a basic understanding of the microcomputer components and control systems. Emphasis on the use and service of the microcomputer and its applications to energy utilization and conservation.

| ELN | 205 | Application of Vacuum Tubes and <br> Transistors | 5 | 6 | 0 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELN 105
Study of the practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, power supplies, and oscillators.

ELN 210 Semiconductor Circuit Analysis $\quad$ Class | Lab | 5 | 4 | 0 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: |

## Prerequisite: ELN 205

Study of the analysis and design of transistor circuits. Network theorems and equivalent circuits are used extensively in evaluating total circuit performance. Device peculiarities and limitations pertinent to reliable operations are considered. H.Y.Z. and T. parameters and signal flow graphs are employed.

## $\begin{array}{lllllll}\text { ELN 211P Communication Circuits } & 4 & 4 & 0 & 6\end{array}$

Prerequisite: ELN 205
Emphasizes the principles involved in the use of components and devices studied and provides for practice in testing the components and using them in simple relationships in circuits with other units.
$\begin{array}{lllllll}\text { ELN } & 214 & \text { Fundamentals of Digital Electronics I } & 3 & 3 & 0 & 4\end{array}$
Prerequisites: ELN 105, MAT 103
Study of broadband amplifiers, magnetic amplifiers, multivibrators, wave shaping techniques, chopper amplifiers, and clipper and clamper circuits.

## ELN 215 Fundamentals of Digital Electronics II $\begin{array}{llllll}3 & 3 & 0 & 4\end{array}$

Prerequisite: ELN 214
Study of the basic principles of pulse circuitry and nonsinusoidal generators and the application of these principles in the field of electronics. Also includes an introduction to basic logic circuitry as applied in digital computers.

| ELN | 220 | Electronic Systems | 5 | 4 | 0 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Corequisite: ELN 215
Block diagram course: includes investigations of numerous electronic systems, using modules or blocks of circuits already studied which have been arranged to produce complex electronic systems. The systems are explained and reduced to functions and then to block diagrams. AM, FM, and Single Sideband transmitters and receivers; multiplexing; TV transmitters and receivers; pulse modulated systems; computers; telemetry; navigational systems; and sonor and radar considered.

| ELN 230 | Medical Electronics | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of transductors and electronic circuits used in biomedical systems such as electrocardiographs, heart-rate monitors, blood pressure monitors, and other medical equipment.
$\begin{array}{lllllll}\text { ELN } & 231 & \text { Introduction to Microcomputers } & 3 & 3 & 0 & 4\end{array}$
Corequisite: ELN 215 or equivalent preparation in digital electronics Introduces the student to the fundamentals and to the hardware and software of microprocessors and microcomputers as they are used to synthesize digital circuits for instrumentation and control.

| ELN | 235 | Industrial Instrumentation | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ELN 205, PHY 104
Introduction to the use of industrial electromechanical and electronic circuits and equipment. Includes methods, techniques, and skills required for installation, service, and operations of industrial control systems. An analysis of sensing devices for detecting changes in pressure, temperature, humidity, sound, light, and electricity; associated circuitry; and indicating and recording devices are included.

ELN 236 Instrumentation and Controls $\quad$| Clinical/ Credit |
| :---: | :---: | :---: | :---: | :---: |
| Shop |

Study of the concepts and applications of various devices to control and monitor energy conversion systems. Special emphasis on applications for energy conservation.

| ELN | 245 | Electronic Design Project | 0 | 4 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELN 205
Students are required to design and construct projects approved by the instructor. Includes selection of project and design, construction, and testing of the completed project. Projects may include AM and FM transmitters or receivers, amplifiers, test equipment, control devices, simple counters, lasers, or masers.

| ELN | 1103 | Introduction to Control Devices | 5 | 0 | 15 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introduction to vacuum tubes and semiconductors used to control direct and alternating current. Characteristics of diodes, triodes, tetrodes, pentodes, and transistors in power suppliers, voltage amplifiers, power amplifiers, and oscillators, and the advantages, disadvantages, and uses of each.

## $\begin{array}{llllllll}\text { ELN } & 1104 & \text { Application of Control Devices } & 5 & 0 & 15 & 10\end{array}$

Study of vacuum tubes and semiconductor devices with characteristic curves and manufacturers' data used to determine how and why a circuit configuration behaves in a predetermined manner. The applications and uses of the different configurations and simple design characteristics of each are included.

| ELN | 1105 | Industrial Electronics and | 5 | 0 | 15 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Instrumentation

Study of electronic components and circuits used in industrial applications. Included is a study of sensory devices and detectors, the associated circuitry and indicating devices, relays, switching and monitoring circuits, and other devices applicable to the field of industrial electronics.

ELN - 1106 \begin{tabular}{lllll}

| Maintenance and Analysis of |
| :--- |
| Electronic Systems | \& 5 \& 0 \& 15 \& 10

\end{tabular}

Study in the analysis and maintenance of electronic systems. Included are component troubles and their effects on circuit behavior as related to electronic systems used in private entertainment and to equipment used in business and industrial applications.
ELN 1107 Communications $\quad 5 \quad 0 \quad 0 \quad 0 \quad 5$

Study of the history, operating principles, and methods of communication. Telephones, radio, television, telemetry, and other types of communications used in private and industrial applications are included.

## ELN 1108 Digital Concepts <br> 500 <br> 5

Introductory study of digital computer fundamentals including binary numbers, logic circuits, arithmetic circuits, bistable circuits, registers, memories, computer operation, microprogramming, and programming.
ELN 1109 Television Broadcasting $\quad 5 \quad 0 \quad 0 \quad 0 \quad 5$

Study of the operation of a broadcast station. Included in the study are job classifications and the responsibilities of each position. Emphasis on student performance of these jobs and on the problems which evolves within certain departments of a broadcast station.

Study of electronic trouble-shooting methods and procedures for radio, high fidelity stereo, tape recorders, television, cameras and video tape recorders, CB and mobile radio, electronic organs, and digital circuits. Included is the use of electronic instruments, test equipment, tools, and auxiliary items.

| ELN | 1118 | Industrial Electronics | 3 | 0 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ELC 1113
Study of basic theory, operating characteristics, and application of vacuum tubes such as diodes, triodes, tetrodes, pentodes, and gaseous control tubes. Includes an introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.
ELN 1119 Industrial Electronics $\quad 3 \quad 0 \quad 6$

## Prerequisite: ELN 1118

Study of basic industrial electronic systems such as motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes, and other basic types of systems commonly found in most industries.

## ELN 1125 Radio Receiver Servicing $5 \quad 0 \quad 0 \quad 5$

Study of the principles of radio reception and practices of servicing. Included are block diagram and schematics of radio receivers, servicing techniques of AM and FM receivers by resistive measurements, signal injection and signal tracing, voltage analysis, and methods of locating faulty stages and components.

ELN 1127 Television Receiver Circuits
$\begin{array}{lllll}\text { and Servicing } & 10 & 9 & 18 & 16\end{array}$
Study of the principles of television reception and practices of servicing. Included are block diagrams and schematics of monochrome and color television receivers, servicing techniques by resistive measurements, voltage and image analysis, and methods of locating and repairing defective components.

## ENGLISH

ENG 010 Reading $\begin{array}{llllll} & 0 & 5 & 0 & 1\end{array}$
Students work on reading skills according to their needs.
ENG 011 Speech Communication $\begin{array}{lllll}0 & 5 & 0 & 1\end{array}$
Students work on oral English with emphasis on conversation, discussion, telephone use, and interviewing.

## ENG 012 Written Communication $\begin{array}{llllll} & 0 & 5 & 0 & 1\end{array}$

Students improve their written English through keeping a journal, writing letters, paragraphs, and essays.

ENG 013 Media Evaluation | $\mathbf{0}$ | 5 | 0 | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- |

Students study a variety of media including books, periodicals, radio, television, and film, and evaluate them in terms of their values and the intended message of each communication.

ENG 0 Class \begin{tabular}{cccccc}

Lab \& Clinical/ \& | Credit |
| :---: |
| Shop | \& Hours

\end{tabular}

Students apply their reading skills by reading and reporting informally.

| ENG | 015 | Fundamentals of English Usage | 0 | 5 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Designed to improve students' written English usage. Focuses on common problems in writing edited American English.

ENG 100R-1 Reading Development $10 \begin{array}{lllll}10 & 0 & 0 & 10\end{array}$
Individualized course designed to review the reading fundamentals as needed by the student.

ENG 100R-2 Reading Development 3
Prerequisite: ENG 100R-1 or equivalent
Individualized course designed to improve the student's reading achievement through a variety of materials.

ENG 100R-3 Reading Development 3
Prerequisite: ENG 100R-2 or equivalent
Individualized course designed to increase reading efficiency, with emphasis on the reading necessary in the individual's curriculum.

ENG 100R-4 Reading Development 3
Prerequisite: ENG 100R-3 or equivalent Individualized course designed to promote the student's reading vocabulary and comprehension.
ENG 100G Basic Grammar $\quad 3 \quad 0 \quad 0 \quad 3 \quad 203$

Prerequisite: ENG 100R-1 or equivalent
Designed to offer basic instruction in grammar. Subject is approached in a practical manner to lay a foundation for improvement in writing skills.

ENG 100G-A Basic Grammar Lab $\quad 0 \quad 2$| $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- |

Designed to improve the student's skills in specifically defined areas of basic grammar. For students who score below a specified score on English Placement Test, make I or F in Basic Grammar previous quarter, or upon request.

Prerequisite: ENG 100R-1 or equivalent
Designed to aid the student in clarity of expression. Functional approach with emphasis on grammar, diction, sentence structure, and punctuation. Intended to stimulate students to apply the basic principles of English grammar in daily situations.

ENG 101A Grammar Lab $0 \quad 2 \quad 0 \quad 1$
Prerequisite: C or lower on 100G or upon student request
Individualized course designed to improve the student's skills in specific areas of grammar.

|  |  | Clinical/ Credit |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Class | Lab | Shop | Hours |  |
|  |  | 5 | 0 | 0 | 5 |

## ENG 101S Secretarial Grammar

$\begin{array}{lll}5 & 0 & 0\end{array}$ 5

Prerequisite: Satisfactory evidence that admission requirements have been met (Placement tests or ENG 100R-3 and/or ENG 101)
Required of all beginning secretarial students as a prerequisite to the shorthand program. Special emphasis is placed on grammar, punctuation, and spelling. Students should earn a grade of 85 or above on this course before entering the shorthand program.
$\begin{array}{lllllll}\text { ENG } 102 \text { Composition } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: ENG 101
Corequisite: ENG 100R-3 or equivalent
Designed to aid the student in the improvement of self expression in business and technical composition. Emphasis is on the sentence, paragraph, and whole composition.
$\begin{array}{lllllll}\text { ENG } & \text { 102A } & \text { Composition Lab } & 0 & 2 & 0 & 1\end{array}$
Prerequisite: C or lower on ENG 101 or by student request Individualized course designed to improve the student's writing skills.

| ENG | 103 | Report Writing | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: ENG 102 and at least two quarters of curriculum work Designed to instruct students in writing for business and industry and tailored to individual curriculums wherever possible. Emphasis is on memos, various types of short reports, graphic communications, proofreading and editing, and the formal report.

| ENG | 105 | Effective Reading | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: Permission of instructor or completion of curriculum reading requirements
Individualized course for students wishing to improve their reading efficiency. Areas of concentration will be selected, based on each student's needs, from rate, vocabulary, comprehension, and reading-study skills in specific subject areas.

## $\begin{array}{lllllll}\text { ENG } & 106 & \text { Spelling Techniques } & 3 & 0 & 0 & 3\end{array}$

Designed to improve spelling ability. Participants study the relationship of spoken English to spelling, spelling patterns, and commonly misspelled words. They also study vocabulary in their areas of concentration such as medicine, law, or architecture.
ENG 150 Composition I $\quad 3 \quad 0 \quad 0 \quad 3$

Prerequisite: Specified scores on English and reading placement tests or ENG 101 and ENG 100R-4
Essential skills of standard written English and the application of those skills in expository and analytical writing. Essays of varying length on subjects drawn from readings in essays and short fiction.
$\begin{array}{lllllll}\text { ENG } 151 \text { Composition II } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: ENG 150
Corequisite: LIB 150
Techniques of library research and the writing of research papers. Subjects for writing assignments are drawn from readings in short fiction and novels.

ENG 152 Composition III $\quad$ Class |  |  | Clinical/ Credit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |  |  |

Prerequisite: ENG 150
Readings in poetry and drama. Papers are written on subjects drawn from readings.
ENG 204 Oral Communications 30003

Introduction to interpersonal communication to enable the student to communicate with others effectively. Focuses on the nature of the communication process, including self-perception, group interaction, and language as a symbolic process. Students make several speeches near the end of the course.
ENG 206 Business Communications $\quad 3 \quad 0 \quad 0 \quad 3$

Prerequisites: ENG 102, BUS 102
Self-paced course designed to develop skills in writing business communications. Business reports, letters, and memoranda are included.

ENG 217 Children's Literature | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Designed to familiarize students with the well-known authors and illustrators of children's literature and to introduce them to the best quality books for young people. Emphasis is on the use of these materials with the children in order to obtain maximum pleasure and learning.

| ENG 250 | British Literature I | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ENG 151, 152
Study of British literature from Beowulf to the Romantic Period.
ENG 251 British Literature II 3

Prerequisites: ENG 151, 152
Continuation of ENG 250; study of British literature from the Romantic Period to the present.
ENG 260 American Literature I 3

Prerequisites: ENG 151, 152
Major works of American literature from the colonial period through World War I.

ENG 261 American Literature II | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: ENG 151, 152
Continuation of ENG 260; major works of American literature from World War I to the present.

ENG 270 Introduction to Theatre $\quad 3 \quad 2$| $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{0}$ | 4 |
| :--- | :--- | :--- | :--- |

Introduction to theatre, including techniques of production. Stage scenery, design, set construction, stage techniques, makeup, lighting, costuming, prop construction, and theatre jargon are included.

ENG 270A Introduction to Theatre Lab $\quad 0 \quad 5 \quad 5 \quad 0 \quad 0$
Practical stage craft and scenery design through application of techniques learned in ENG 270.

## ENG 271 Basic Acting Techniques

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 3 | 2 | 0 | 4 |

Prerequisite: ENG 270
Basic course in acting techniques as applied to technical theatre and stage craft production. The beginning student learns stage terminology and receives training in techniques, processes, operation, and application of play production.

ENG 271A Basic Acting Techniques Lab $\quad 0 \quad 0 \quad 5 \quad 0$
Corequisite: ENG 271
Basic acting techniques through practical application.
$\begin{array}{lllllll}\text { ENG } 272 & \text { Problems in Production } & 3 & 2 & 0 & 4\end{array}$
Prerequisite: ENG 270
Advanced course of study in stage scenery and design with the major emphasis on special and advanced technical theatrical problems of production. Special effects, advanced lighting techniques, set construction difficulties, sound effects, and theatrical management are emphasized. Publicity and public relations are also included.

ENG 272A Problems in Production Lab $\quad 0 \quad 5 \quad 0 \quad 0$
Corequisite: ENG 272
Advanced stage design through practical application.

ENG 273 Acting and Directing Techniques | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: ENG 271
Advanced course in acting and directing techniques. Major emphasis on play selection, community involvement, publicity, other communicative media (television, radio, motion picture). In addition, students become fully acquainted with all aspects of the financial management of the theatre.

ENG 273A Acting and Directing Techniques Lab $0 \quad 0 \quad 5 \quad 0$
Corequisite: ENG 273
Advanced acting and directing techniques through practical application.
ENG 274 Advanced Directing Techniques $\quad 3 \quad 2 \quad 2 \quad 0 \quad 4$
Prerequisite: ENG 273
Study of drama from the director's point of view. Students assist in directing scenes and acts of short plays and in scene synopsis.

ENG 274A Advanced Directing Techniques Lab 0 0 0
Corequisite: ENG 274
Advanced directing techniques through practical application.
$\begin{array}{lllllll}\text { ENG } 275 & \text { Playwriting Techniques } & 3 & 2 & 0 & 4\end{array}$
Prerequisite: ENG 274
Study of the play as a form of creative expression; includes analysis of the play for plot, action, and character development. Each student writes and directs a one act play.

ENG 275A Playwriting Techniques Lab

$$
0
$$

$0 \quad 5$
0
0
Corequisite: ENG 275
Advanced playwriting techniques through practical application.

|  |  |  | $c$ | Clinical/ | Credit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Class | Lab | Shop | Hours |  |  |
|  | 1000 | Reading Improvement | 10 | 0 | 0 | 10 |

Individualized course designed to review the reading fundamentals as needed by the student.

Prerequisite: ENG 1000 or equivalent
Individualized course designed to improve student's reading skills through use of various materials.


Prerequisite: ENG 1101 or equivalent
Designed to improve students' communication skills in specific work situations. Learning experiences include completing job applications, job interviews, letter writing, telephone communications, technical vocabulary, and customer communications.

ENG 1108 Efficient Reading 2 | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: Permission of instructor or completion of curriculum reading requirements
Individualized course for students wishing to improve their reading efficiency. Areas of concentration will be selected, based on each student's needs, from rate, vocabulary, comprehension, and reading-study skills in specific areas.

## ENVIRONMENT

ENV 101 Environmental Orientation $\quad 4$|  | 4 | 2 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

An introduction to environmental education, fields of employment and duties performed. Lectures and field trips designed to introduce the student to methods of disease transmission, municipal and industrial disposal of solid and liquid wastes, protection and treatment of water, industrial hygiene, air and noise pollution, swimming pool sanitation, and insect and rodent control.

## ENV 103 General Biology $\begin{array}{lllll}3 & 2 & 0 & 4\end{array}$

This course will be designed to acquaint students with basic topics of modern biological study. Subjects will include: cell structure and function, tissues, organs and organ systems, energy and living organisms, digestion patterns, transport of materials in living organisms, gas exchange, origin and reproduction of life, theory of evolution, taxonomy, ecology, effects of pollution on living organisms.

| ENV 104 | Environmental Biology | 4 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ENV 103, CHM 102
Study of living conditions in typical ambient, land-based, and aquatic environments as they relate to the pollution problem. Introduction to physical, chemical, biological, and microbiological techniques of environmental monitoring.

ENV 105 Environmental Microbiology $\quad 2$|  | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: ENV 101, 103
Isolation, identification, and classification of microorganisms (bacteria, fungi, algae, protozoa, viruses) and a study of their relationship to food production and preservation and to air, water, and food borne disease. Collection techniques and laboratory procedures for microbiological analysis of air, water, food, and soil samples.

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 4 | 2 | 0 | 5 |

## ENV 107 Water Resources Management

Prerequisites: ENV 104, CHM 103
Present topics concerning drinking water production, including water supply; water needs; present and future protection of surface and ground water supplies; collection, treatment, storage and distribution of water for public use; and introduction to laboratory analysis of raw and treated waters.

## ENV 112 Air Resources Management $\quad 3 \quad 2 \quad 0 \quad 0 \quad 4$

Prerequisite: ENV 101
An introductory course to the field of air pollution technology. Air resources management is the effort to abate existing pollution and to prevent future pollution. Such a program must define the problem and determine the quality of air that is most desirable. Types of air contaminants, their source of emission, and their ill effects are identified. Source emission inventories, sampling and analysis, control techniques, meterological effects, and facets of an air pollution program are introduced.

| ENV | 115 | Environmental Physics I | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 101
Incorporates several topics relating to the study of physical phenomena. Special topics include: Greek alphabet, metric system, plane and solid geometry, conversion between various units, graphical portrayal and interpretation of data, and the use of calculator and algebraic techniques. Physical concepts studied are work, energy, power, behavior of gases, and basic thermodynamics, as they relate to environmental conditions and principles of conservation.

| ENV | 116 | Environmental Physics II | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Prerequisite: ENV 115

Continuation of ENV 115. Emphasis on fluid mechanics, electricity, and electronics. Fluid mechanics discussed in detail as related to environmental problems. Includes general electrical principles and various applications of electrical and electronic devices.

## $\begin{array}{lllllll}\text { ENV } 195 & \text { Environmental Practicum } & 0 & 40 & 0 & 13\end{array}$

Cooperative program supported by local industries and city, county, state, and federal agencies engaged in environmental fields to provide summer practical experience in a related area.

| ENV | $200 A$ | Environmental Projects | 0 | 3 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ENV | $200 B$ | Environmental Projects | 0 | 6 | 0 | 2 |
| ENV | $200 C$ | Environmental Projects | 0 | 9 | 0 | 3 |

Designed for students who wish to specialize or expand their knowledge in certain areas of environmental studies. Hours and course requirements to be arranged with Air and Water Technology department faculty.

| ENV 201 | Environmental Laboratory I | $\mathbf{3}$ | $\mathbf{4}$ | 0 | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: ENV 107, CHM 104
Discussion and performance of several physical, chemical, biological, microbiological, and instrumentative tests performed on "clean" and "polluted" surface and ground waters. Tests performed will include: turbidity, pH , color solids, dissolved oxygen, chlorides, fluorides, hardness, heavy metals, coliform bacteria, bioassay, pesticides, detergents.

ENV 205 Environmental Laboratory II $\quad$ Class |  |  | Lab | Clinical/ | Credit |
| :---: | :---: | :---: | :---: | :---: |
| Shop |  |  |  |  | Hours

Prerequisites: ENV 201, CHM 104
Theory and laboratory techniques pertaining to waste water treatment to include sampling and analysis; DO, BOD, COD, phospate, solids, nitrogen compounds sulfate, chloride, fluoride, volatile acids, chlorine residual, and chlorine requirements.

## $\begin{array}{lllllll}\text { ENV } 212 & \text { Air Pollution Sources and Control } & 3 & 4 & 0 & 5\end{array}$

Prerequisites: ENV 101, 112
An introduction to the major industrial processes and energy producing reactions which are potential sources of air pollution, including chemical processing, petroleum and metals production, pulp and paper, foods and feeds, and automobiles. Various types of control equipment are studied. Allows students to achieve an understanding of specific problems relating to the control of air pollution within each industry.

## $\begin{array}{lllllll}\text { ENV } & 217 & \text { Waste Water Treatment } & 3 & 2 & 0 & 4\end{array}$

Prerequisites: ENV 107, CHM 103
A course presenting the liquid waste problem and methods of treatment of liquid waste: sewage composition, sewage types, decomposition, dilution, land disposal, pretreatment, flow measurements, primary treatment, aeration, biological purificetion, digestion, filtrations, disinfection, agricultural and industrial waste management, plant records, and laws and regulations.
$\begin{array}{lllllll}\text { ENV } & 218 & \text { Environmental Instrumentation I } & 2 & 4 & 0 & 4\end{array}$
Prerequisites: ENV 205, CHM 104
A course covering the theory and practical application of the use of an atomic absorption spectrophotometer and the specific ion analyzer in detection and analysis of water and air pollutants.

## ENV 219 Environmental Instrumentation II <br> 24 <br> 0 <br> 4

Prerequisites: ENV 218, CHM 104
A course in the practical application of the use of a gas chromatograph in detection and analysis of hydrocarbons in air pollution and pesticides in water pollution. Theory and familiarization with continuous monitoring equipment for capture and analysis of air pollutants will be covered. Use of this equipment will be taught when equipment becomes available.

| ENV | $220 A$ | Environmental Projects | 0 | 3 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ENV | $220 B$ | Environmental Projects | 0 | 6 | 0 | 2 |
| ENV | $220 C$ | Environmental Projects | 0 | 9 | 0 | 3 |

Designed for students who wish to specialize or expand their knowledge in certain areas of environmental studies. Hours and course requirements to be arranged with Air and Water Technology department faculty.

ENV 226 \begin{tabular}{lllll}
Atmospheric Air Sampling <br>
and Analysis

$\quad 2$

\& 2 \& 0 \& 5
\end{tabular}

Prerequisites: ENV 201, CHM 104
Principles and methodology of atmospheric air sampling and analysis; practical application of gas laws to air movers and air measuring instruments; selection of sampling sites; calibration, operation and maintenance of air sampling equipment; and laboratory
analysis of major air pollutants such as $\mathrm{SO}_{2}, \mathrm{NO}_{2}, \mathrm{O}_{3}$, aldehydes, and acrolein. Familiarization with continuous monitoring equipment.

| ENV | $230 A$ | Environmental Projects | 0 | 3 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ENV | $230 B$ | Environmental Projects | 0 | 6 | 0 | 2 |
| ENV | $230 C$ | Environmental Projects | 0 | 9 | 0 | 3 |

Designed for students who wish to specialize or expand their knowledge in certain areas of environmental studies. Hours and course requirements to be arranged with Air and Water Technology department faculty.

ENV 236 Air Pollution Source Sampling $\begin{array}{llll}\text { and Analysis } & 2 & 6 & 0\end{array}$ 5

Prerequisite: ENV 212
Source sampling principles and methodology; gas laws and their practical application to measurement of gas velocities and flow rates; site selection and preparation, calibration, maintenance and operation of stack sampling equipment and mobile source sampling equipment; also, collection, measurement, and analysis of most common air pollutants such as ammonia, NOx, SOx, HC, Co, fluorides, and chlorine.

| ENV | 240 A | Environmental Projects | 0 | 3 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ENV | $240 B$ | Environmental Projects | 0 | 6 | 0 | 2 |
| ENV | 240 C | Environmental Projects | 0 | 9 | 0 | 3 |

Designed for students who wish to specialize or expand their knowledge in certain areas of environmental studies. Hours and course requirements to be arranged with Air and Water Technology department faculty.

Relocation of old corners and lines and the legal aspects of land surveys. Forest road layout.

## GEOGRAPHY

GEO 150 Introduction to Geography $\quad 5 \quad 0 \quad 0 \quad 5$

Prerequisite: Specified score on reading placement test or ENG 100R4
Major physical and cultural elements of the environment and their influence on human activity.

## HEALTH

$\begin{array}{llllllll}\text { HEA } & 110 & \text { First Aid and Medical Terminology } & 2 & 2 & 0 & 3\end{array}$
Provides students with the basic skills necessary to provide first aid in common emergencies. Instruction also includes an introduction to anatomy and basic medical terminology used in legal matters.

HEA 150 Personal and Community Health $\quad$\begin{tabular}{ccccc}
\& \& \& Class \& Labical/ Credit <br>
Shop

 

Hours
\end{tabular}

Investigation of mental, social, and physical health problems related to man's internal and external environment in technological and leisure oriented societies. The objective is efficient and effective performance in daily living through maintenance of optimal personal and community health.

## HISTORY

| HIS 096 | Geography and Economics | 0 | 5 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The areas of geography and economics have played key roles in the evolution of our country's history. The geography and its impact along with the economic circumstances and the interplay between the two will be discussed.
$\begin{array}{lllllll}\text { HIS } 097 & \text { Current Affairs } & 0 & 5 & 0 & 1\end{array}$

The importance of current events in the progression of history will be discussed along with the reasons for and/or the history of these major events.

## HIS 098 American Biography $0 \quad 5 \quad 0 \quad 0 \quad 1$

A study of major figures in American history and the parts they have played in the formation of our American society.

## HIS 099 American History $0 \quad 15 \quad 0 \quad 3$

A study of the history of the United States from the colonial period to the present.

HIS 150 American History I | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite: Specified score on reading placement test or ENG 100R-4 History of the United States from its beginning to the end of Reconstruction.
HIS 151 American History II 5

Prerequisite: Specified score on reading placement test or ENG 100R-4 History of the United States from Reconstruction to the present.
HIS 160 World History to $1500 \quad 5 \quad 0 \quad 0 \quad 5$

Prerequisite: Specified score on reading placement test or ENG 100R-4 Development of civilization from prehistory to the Reformation.
HIS 161 History of Europe Since $1500 \quad 5 \quad 0 \quad 0 \quad 5$

Prerequisite: Specified score on reading placement test or ENG 100R-4 European civilization from the Renaissance to the present.

## HUMAN SERVICES

HSA 100 Basic Health Science $3 \quad 0 \quad 0 \quad 3$

Introduction to the normal structure and functioning of the human body, briefly covering all systems. The normal body is studied as the basis for understanding variations from normal and the need to maintain homeostasis. Included within each system is pertinent information concerning hygiene, nutritional requirements, basic first aid, and medical terminology.

Designed to promote professional, program, and personal identification and development. Emphasizing verbal and nonverbal interaction in interpersonal communication. Strongly recommended for all first year Human Services Technology students.
$\begin{array}{lllllll}\text { HSA } & 111 & \text { Introduction to Human Services } & 3 & 3 & 0 & 4\end{array}$
Introduction to the history of human services and related theories and systems. Agencies, institutions, and programs which help meet human services needs are studied in broad context of social and political systems. Guest lecturers, representative of human services occupations, and field trips to agencies and institutions delivering human services offer a familiarization with the components of the delivery system.

## $\begin{array}{lllllll}\text { HSA } & 112 & \text { Group Processes I } & 1 & 3 & 0 & 2\end{array}$

Introduction to interpersonal concepts and problems of communication in interpersonal transactions. Designed to allow students to become more aware of themselves and their feelings about themselves and other people with whom they come in contact. To facilitate this self-awareness and personal growth, students work in small groups, learning through analyses of their own experiences including feelings, reactions, perceptions and behavior.
$\begin{array}{llllll}\text { HSA 112P Practicum I } & 1 & 6 & 0 & 3\end{array}$
Prerequisite: Permission of instructor
Students spend six hours per week in clinical laboratory experiences under the supervision of a qualified instructor. Emphasis on the application of concepts and principles from related course content.

| HSA 113 | Group Processes II | 1 | 3 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: HSA 112 or permission of instructor
Continued study of interpersonal relationships in small group interactions. Students work in small groups during the quarter, learning through analyses of their own experiences, including feelings, reactions, perceptions, and behavior, using the framework of transactional analysis.

## HSA 113P Practicum II

160
3
Prerequisite: Permission of instructor
Continuation of Practicum I

## HSA 114 Interviewing and Counseling

$\begin{array}{lll}3 & 2 & 0\end{array}$
4
Study of purpose, structure, focus, and techniques employed in effective interviewing. Laboratory experiences providing opportunities for observation, practice, recording, and summarizing personal histories under faculty supervision. Importance of interview as client's initial encounter with system is stressed; interviewing to meet need of client rather than of system.

Work in a human services agency, institution, or program under the supervision of agency staff and college personnel. Students have an opportunity to apply and practice what has been learned in the program while learning from the professionals in the field.

|  |  |  | Clinical/ | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HSA 202 | Class | Lab | Shop | Hours |

Continuation lab of HSA 102 for Human Services Technology students to enhance professional and personal development. Emphasis placed on verbal and nonverbal techniques to facilitate interpersonal communication. Strongly recommended for second year Human Services Technology students.

| HSA | 220 | Activities in Human Services | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Overview of the types of activities (occupational, recreational, play, music, drama, nonverbal) utilized as therapeutic techniques with particular emphasis on the purpose of each: ways of creating and holding interest in the activity; and the role of the Human Service Associate in assisting patients to participate.

INSURANCE
$\begin{array}{lllllll}\text { INS } 214 & \text { General Insurance, Part I: } & 2 & 0 & 0 & 2\end{array}$

Study of types of risk management concepts; examination of various types of insurance and functions of insurance companies; interpretation of laws and regulations affecting the insurance industry.

| INS | 215 | General Insurance, Part II: Life, <br> Accident and Health Insurance | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: INS 214
Study of exposures, types, policy provisions and practices of life, accident, and health insurance; interpretation of regulations and laws relating to life, accident, and health agents; examination of various social insurance plans.

| INS 216 | General Insurance, Part III: Fire, <br> Property, and Casualty Insurance | 2 | 0 | 0 | 2 | 213 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: INS 214
Study of automobile insurance, general liability exposures, and insurance for worker's compensation, commercial fire, home owner's, crime, government, fire and casualty insurance.

## INDUSTRIAL SCIENCE

ISC 102 Industrial Safety $3 \quad 0 \quad 0 \quad 3$
Deals with the many elements of an industry-wide safety program. Provides an in-depth treatment of job safety analysis, plant inspection, plant arrangement, housekeeping, and the maintenance and handling of materials. Special emphasis given to compliance with the new Occupational Safety and Health Act, and to paperwork procedures and processes.

ISC
110, 120, 130 Readings in Industrial Management
Designed for students who wish to specialize or expand their knowledge in industrial management under the supervision of the Industrial Management faculty. Structured to enable study of materials related to concepts in industrial management.

Organizational structure for industrial management including operational and financial activities. Accounting, budgeting, credit and industrial risks, forecasting and markets, selection and layout of physical facilities, selection, training, and supervision of personnel as found in typical industrial organizations.

Prerequisite: MAT 101
Provides an overview of quality control activity and its scope throughout the entire business system of a company. Among the topics discussed are the elements of quality control work, the organization required to get the work accomplished, methods of measuring the effectiveness of the function, and the integration of the various qualityrelated activities of the organization into a quality system.

ISC 203 Motion Economy 3 0 $\begin{array}{lllll}3 & 0 & 3\end{array}$
Provides a systematic, practical, and logical treatment of motion and time study as utilized in today's business and industrial enterprise. Covers direct and indirect work and office activities and looks at the broad range of work measurement techniques. Recently developed concepts and techniques evaluated.

ISC 204 Value Analysis $3 \begin{array}{llll}3 & 0 & 0 & 3\end{array}$
Common sense approach to cost reduction. Provides students with an opportunity to review in depth the concept and techniques of value analysis and engineering. Emphasis is placed upon identifying and removing unnecessary production costs.
$\begin{array}{lllllll}\text { ISC } 205 & \text { Maintenance Management } & 3 & 0 & 0 & 3\end{array}$
Administration, decision making, setup, and inspection of various programs such as preventive maintenance, repair parts, inventory control, and organization and functions of maintenance. Various aspects of management, engineering, resources analysis, and maintenance facilities covered.

ISC 209 Plant Layout 4
Provides a practical study of factory planning with emphasis on the most efficient arrangement of work areas to achieve lower manufacturing costs. Sample layouts for small and medium sized industries covered. Also, the effective use of personnel, money, machinery, and materials.
$\begin{array}{lllllll}\text { ISC } 213 & \text { Production Planning } & 4 & 0 & 0 & 4\end{array}$
Introduces the production function of the business or industry in its daily manufacturing process. Functions reviewed are forecasting, product planning, and control, scheduling, dispatching, and routing. Case histories are discussed in the classroom and courses of corrective action are developed. Actual layouts are utilized for planning and control.

Provides a basic understanding of industrial materials, machines, and processes utilized in today's manufacturing and assembling plants. Reviews the rapid development of new materials, mechanization and automation, and the complex process of manufacturing.

ISC 232 Labor Relations $\quad$ Class | Lab | Clinical/ Credit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |

Covers the history of the labor movement in the United States with its structural and legal framework; examines the negotiation, administration, and major contents of the labor contract itself. Special studies of arbitration cases which illustrate the theories in realistic terms provided.
ISC 1101 Industrial Safety $3 \quad 0 \quad 0 \quad 3$

A study of the development of industrial safety: accident occurrence and prevention; analysis of accident causes and costs; basic factors of accident control; safety education and training; accident reporting and records; employer and employee responsibility; safety organizations; first aid; mechanical safeguards; personal protective equipment use; materials handling; fire prevention and fire protection; safety codes; and accident statistics.

## JOURNALISM

JOU 150 Introduction to Journalism $\quad 3 \quad 0 \quad 0 \quad 3$

Basic familiarization with principles of the newspaper in categories such as basic newswriting, principles of production, layout and design, staff organization, sports writing, feature writing, editorial writing, and the purposes and functions of a newspaper.

| JOU 150A | Introduction to Journalism Lab | 0 | 2 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Application of skills acquired in Introduction to Journalism.
JOU 151 Essentials of Newswriting $\quad \mathbf{3} \quad 0 \quad 0 \quad 3$

Analysis of the newswriting procedure, including fact gathering, style, purpose, principles, editing, and maintenance of objectivity.

JOU 151A Essentials of Newswriting Lab $\quad 0 \quad 2 \quad 0 \quad 0$
Application of skills and knowledge pertaining to newswriting.
JOU 152 Newspaper Layout and Production $\begin{array}{llllll}3 & 0 & 0 & 3\end{array}$
Analysis of the basic principles of layout and design. Students attain a functional knowledge of the process involved in offset and letterpress lithography.
$\begin{array}{lllllll}\text { JOU 152A } & \text { Newspaper Layout and Production } & 0 & 2 & 0 & 0\end{array}$ Lab
Application of skills and knowledge pertaining to newspaper layout and production.
JOU 250 Feature Writing $\quad 3 \quad 0 \quad 0 \quad 3$

Analysis of feature writing with concentration on columns, human interest features, news features, and creative journalism.

JOU 250A Feature Writing Lab $0 \begin{array}{llll}0 & 2 & 0 & 0\end{array}$ Application of skills and knowledge pertaining to feature writing.

## JOU 251 Editorial Writing and Policy

|  |  | Clinical/ | Credit <br> Shop |
| :---: | :---: | :---: | :---: |
| Class | Lab | Sours |  |
| 3 | 0 | 0 | 3 |

Analysis of editorial style and content with concentration on structure. Point of view, policies, and editorial liability.

JOU 251A Editorial Writing and Policy Lab 00
Application of skills and knowledge pertaining to editorial writing and policy.

JOU 252 Special Topics Seminar | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Analysis of special areas of journalism including opportunities in journalism, photography, journalistic art, advertising, creative journalism, and non-newspaper journalistic media.

JOU 252A Special Topics Lab | 0 | 2 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- |

Application of skills and knowledge pertaining to special topics.

## LEGAL EDUCATION

LEC 203 Legal Research II 30003
Continuation of CJC 102 Legal Research I.
LEC 204 Advanced Business Law 30003

Prerequisite: BUS 167
Analysis of basic concepts of business corporations, partnerships and joint ventures, and sole proprietorships with emphasis on drafting articles of incorporation, by-laws, minutes, resolutions, stock certificates, and partnership and joint venture agreements. Also deals with problems in business finance and acquisitions and in related areas of commercial law, stock transfer and purchase agreements, and employment contracts. Consideration of general tax and the role of the lawyer and paralegal.

## LEC 207 Law Office Management 300003

Includes the study of the organization of a law office, office forms and legal forms, filing equipment and systems, accounting systems for a lawyer's time, fees, and billing, silent relations, and office procedure. Also familiarizes students with the operation of office machines and equipment.

210 Real Property and Title Abstracting I

2020 3

Examination of the applicable statutory and common law principles including the form and adequate execution of documents; the functions of judgments and estates in the determination of whether a title to real estate is marketable; the study and function of various documents, indices and files on public records in various county offices. Forms of abstracting title information from public records and summaries thereof included. Various typical problems and errors which may render a title unmarketable included.

LEC \begin{tabular}{lllll}

\& $\mathbf{2 1 1}$| Real Property and Title |
| :--- |
| Abstracting II | \& $\mathbf{2}$ \& $\mathbf{2}$ \& $\mathbf{0}$

\end{tabular} $\mathbf{3}$

Continuation of LEC 210.

|  |  | Class | Lab | Shop | Hours |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| LEC | 212 | Real Estate Transactions | 2 | 2 | 0 | 3 |

Includes the study of the preparation of simple contracts for sale of real estate; ordering title search; examining title searches and preparing simple titles, ordering title insurance, preparation of settlement sheet and holding closing, informing purchasers of needed documents and funds, disbursement of fund and recording documents, preparation of certificate of title for lawyer's signature. Also covers the draftings of mortgages and deeds of trust, the closing procedures of these land financing transactions, and foreclosure upon default.
LEC 220 Family Law
300
3

Study of the rights and obligations of the marriage contract; divorce; annulment; separation by court order and by consent; defenses to divorce; child custody; adoption, name change, and bastardy proceedings; alimony, child support, Aid to Dependent Children, and welfare; North Carolina juvenile law.

## LEC 224 Torts 30003

Study of the principles behind personal injury settlements and litigation with an emphasis on North Carolina law.
LEC 229 Taxes 3 0 0

Application of federal and state taxes to various businesses and business conditions. Study of the following taxes: income, payroll, intangible, capital gains, sales and use, excise, and inheritance.

## LEC 232 Estate Administration $\begin{array}{lllll}3 & 0 & 0 & 3\end{array}$

Students instructed in the drawing of a will, making arrangements with the probate office for probate of will or issuance of letter of administration, preparing simple transfer of inheritance tax forms, marshaling of assets, payment of debts of estate, preparation of interim and final accounting, and preparation of refunding bonds and releases.

## LEC 240 Litigation Preparation $\begin{array}{lllll}3 & 0 & 0 & 3\end{array}$

Teaches the paralegal how a lawyer prepares briefs prior to entering court proceedings. Students taught how to review a file; prepare subpoenas ready for the lawyer's signature; prepare exhibits for court; file pleadings; and index interrogations, depositions, admissions, and pleadings. Prepares students to interview witnesses and record statements in writing and on tape.

## $\begin{array}{lllllll}\text { LEC } & 250 & \text { Paralegal Internship } & \mathbf{1} & \mathbf{9} & \mathbf{0} & \mathbf{4}\end{array}$

Prerequisite: The internship is an add-on elective. Students completing the majority of their work may elect to take this course with the permission of the instructor or coordinator. Students spend nine hours per week in an approved law office under the supervision of an attorney. Emphasis placed on exposing students to a variety of experiences encountered in the legal profession.

## LIBRARY SCIENCE

Library and its resources, usually taken concurrently with ENG 151.

\section*{MASONRY <br> MAS 1101 Bricklaying I <br> |  |  | Clinical/ | Credit |
| :---: | :---: | :---: | :---: |
| Class | Lab | Shop | Hours |
| 3 | 0 | 21 | 10 |}

History of the bricklaying industry. Clay and shell brick, mortar, laying foundations, laying bricks in a line, bonding, and tools and their uses. Laboratory work provides training in the basic manipulative skills.

| MAS | 1102 | Bricklaying II | 3 | 0 | 21 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAS 1101
Designed to give students practice in selecting the proper mortars, layout, and construction of various building elements such as foundations, walls, chimneys, arches, and cavity walls. Proper use of bonds, expansion strips, wall ties, and caulking methods stressed.

## MAS 1103 Bricklaying III 210002109

Layout and erection of reinforced grouted brick masonry lintels, fireplaces, glazed tile, panels, decorative stone, granite, marble, adhesive terra cotta, and modular masonry construction theory and techniques.

MAS 1104 Bricklaying IV $21 \quad 0 \quad 21 \quad 9$
Continued application of techniques acquired in MAS 1103 with emphasis on further refining the skills of a mason.

## $\begin{array}{llllll}\text { MAS } 1113 & \text { Masonry Estimating I } & \mathbf{1} & 0 & 3 & 2\end{array}$

Prerequisite: MAS 1103
Figuring the quantities of materials needed and costs of building various components and structures. Practical course in quantity "take off" from prints of the more common type of jobs for bricklayers and masons.

Continuation of MAS 1113 with some emphasis being given to quantity "take off" from prints of the more complicated kind.

## MATHEMATICS

099 Developmental Mathematics $\quad 5 \quad 0 \quad 0 \quad 5$

Course designed for students whose background in the area of mathematics is limited. Does not carry credit toward an associate degree.

| MAT 100R Computational Skills | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 099
Whole numbers, fractions, decimals, and percents.

| MAT | 100 | Review of Fundamental <br> Mathematics | 5 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 100R
Fractions, decimals, percents, ratios, proportions, and an introduction to algebra.

| MAT | 101 | Algebra 1 | 5 | 0 | 0 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Prerequisite: MAT 100
Basic algebraic operations, linear equations, factoring, algebraic fractions, graphing, systems of linear equations, exponents, and radicals.

|  |  | Clinical/ Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MAT | 102 | Trigonometry | Class | Lab | Shop | Hours |

## Prerequisite: MAT 101

The trigonometric functions, acute angles, right triangles, radian measure, graphs of trigonometric functions, trigonometric identities, trigonometric equations, inverse trigonometric functions, logarithms, and oblique triangles.

| MAT 103 | Algebra II | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 101
Exponentials, roots, quadratic equations, and inequalities of one variable, first degree relations and functions, second degree relations and functions, systems of equations, and logarithmic functions.

| MAT 104 Calculus I | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: MAT 102, 103
Equations of higher degree, the derivative with application, and integration with application.
$\begin{array}{lllllll}\text { MAT } 110 & \text { Business Mathematics } & 5 & 0 & 0 & 5\end{array}$
Prerequisite: MAT 100R
Stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marketing, interest, discounts, commission, taxes, and pertinent uses of mathematics in the field of business.
$\begin{array}{lllllll}\text { MAT } & 111 & \text { Computer Mathematics } & 5 & 0 & 0 & 5\end{array}$
Course studies those mathematical concepts that will help EDP personnel to better understand the function of a computer and operations with a computer. Topics include number systems and arithmetic operations, sets, logic, Boolean algebra, statistics, scientific notation, and matrix algebra.
$\begin{array}{lllllll}\text { MAT } & 114 & \text { Basic Math for Health Professions } & 3 & 0 & 0 & 3\end{array}$
This course includes a review of some basic concepts of arithmetic. The basic operations (addition, subtraction, multiplication, and division) are studied with respect to fractions and decimals. Includes a study of percents, systems of measurement, and methods of calculating dosages.

| MAT 150 | College Algebra | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 101 and either specified score on reading placement test or ENG 100R-4
Course covers sets; linear, quadratic, polynomial, and exponential functions; inequalities; permutations; and combinations.

| MAT | 180 | Statistical Analysis I | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 150
Sampling of probability distributions, measures of central tendency and dispersion, hypothesis testing, Chi-square, and regression.
$\begin{array}{lllllll}\text { MAT } 201 & \text { Calculus II } & 5 & 0 & 0 & 5\end{array}$
Prerequisite: MAT 104
Continuation of MAT 104. More advanced concepts of differentiation and integration. Introduction to solutions of differential equations and to Fourier series.

|  |  |  | Clinical/ | Credit |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| MAT | 210 | Concepts of Elementary Math | 5 | 0 | 0 | 5 |

Prerequisite: MAT 100R
Introduction to elementary school mathematics. Sets, number systems, prime numbers, the four basic operations of arithmetic, equations, and an introduction to geometry.

| MAT | 0099 | Developmental Mathematics | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Designed for students whose backgrounds in the area of mathematics are limited. Does not carry credit toward a diploma.

| MAT 1000 | Computational Skills | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 0099
Whole numbers, fractions, decimals, and percents.

| MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 1000
Fractions, decimals, percents, ratios, proportions, exponents, square roots, and evaluation of formulas.
MAT 1102 Algebra 5

Prerequisite: MAT 1101
Basic algebraic operations, linear equations, exponents, graphing, systems of equations, and radicals.

## $\begin{array}{lllllll}\text { MAT } 1103 & \text { Basic Geometry and Trigonometry } & 5 & 0 & 0 & 5\end{array}$

## Prerequisite: MAT 1101

Basic definitions and properties of plane and solid geometric figures, areas of plane figures, volumes of solids, trigonometric functions of any angle, and solution of right triangles.
$\begin{array}{llllll}\text { MAT } 1112 & \text { Building Trade Mathematics } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: MAT 1101
Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.

MAT 1112M Building Trade Mathematics:
Masonry 300003

Practical problems dealing with whole numbers, fractions, decimals, percents and square roots as it relates to masonry materials.

| MAT 1113 | Building Trade Mathematics: <br> Masonry | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 1112M
Practical problems dealing with linear, square, and volume mensuration as related to masonry.

Prerequisites: MAT 1102, 1103
Introduces gear ratio, lead screw, and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with

## Clinical/Credit <br> Class Lab Shop Hours

experience in geometric propositions and trigonometric relations to shop problems. Concludes with an introduction to compound angle problems.

## MECHANICS

| MEC | 101 | Machine Processes | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introductory course designed to acquaint students with basic hand tools, safety procedures, and machine processes of modern industry. Includes a study of measuring instruments, characteristics of metals, and cutting tools. Students become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

| MEC 102 | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MEC 101
Advanced operations on lathe, drilling, boring, and reaming machines. Milling machine theory and practice. Study of the types of milling machines, cutters, jug and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.
$\begin{array}{lllllll}\text { MEC } & 112 & \text { Machine Shop Processes } & 1 & 3 & 0 & 2\end{array}$
Acquaints students with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and lathe tools, and setup work applied to the trade.

| MEC | 114 | Shop Practice | 1 | 6 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MEC 112
Designed to acquaint students with basic fundamentals of installation, maintenance, and repair of machine tools. Machine maintenance and accuracy emphasized. Slip and press fits produced to include bearing assembly. Miscellaneous hydraulic, pneumatic, and lubrication devices studied. Machine location, leveling and fastening discussed. Integration of machining and fabrication developed by related shop projects. Implementation and operation of preventive maintenance systems studied.

## $\begin{array}{llllll}\text { MEC } & 210 & \text { Physical Metallurgy } & 3 & 3 & 0\end{array}$

Introductory course in metallurgy; basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes, liquid and vapor phases, phase diagrams, and alloy systems.

## $\begin{array}{lllllll}\text { MEC } & 222 & \text { Rigging and Material Handling } & 2 & 3 & 0 & 3\end{array}$

Transporting, conveying, transferring, self-loading and bulk-handling equipment introduced. Use of wire rope, slings, chains, scaffolds, and ladders investigated. Proper storage of materials covered.

| MEC | 235 | Hydraulics and Pneumatics | 3 | 3 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs.

MEC 298 Maintenance Problems I

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 2 | 3 | 0 | 3 |

Broadens the experiences of students in the areas of mechanics. Problems involving various types of equipment given to demonstrate the check list method of maintenance and preventive maintenance. The use of precision measuring tools and checking for accuracy, squareness, and correct center line distances stressed for prestart inspection. Study in everyday manufacturing problems and solutions. Includes a major part of emphasis on live projects. Projects include selection by the student of the proeprfeeds, speeds, linkage, and controls of power transmissions, as well as bearings and gears, installation, and repair. Special emphasis on interpretation of catalog information and reference material.
$\begin{array}{lllllll}\text { MEC } 299 & \text { Maintenance Problems II } & 2 & 3 & 0 & 3\end{array}$
Continuation and in-depth study of MEC 298.
$\begin{array}{llllllll}\text { MEC } & 1101 & \text { Machine Shop Theory and Practice } & 3 & 0 & 12 & 7\end{array}$
Introduction to the machinist trade and the potential it holds for craftsmen. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures of lathe, drill press, grinding (off-hand), and milling machines introduced both in theory and practice.
$\begin{array}{lllllll}\text { MEC } & 1102 & \text { Machine Shop Theory and Practice } & 3 & 0 & 12 & 7\end{array}$
Prerequisite: MEC 1101
Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, and milling machine shaper. Students introduced to the basic operations on the cylindrical grinder; projects selected encompassing all the operations, tools, and procedures thus far used and those to be stressed throughout the course.

Advanced work on the eingine lathe; turning, boring and threading machines; grinder; milling machines; and shapers. Introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, and worm gears and wheels. Trainees use precision tools and measuring instruments such as vernier height gauges, protractors, and comparators. Basic exercises given on the turret lathe and on the tool and cutter grinder.

## $\begin{array}{llllllll}\text { MEC } & 1104 & \text { Machine Shop Theory and Practice } & 3 & 0 & 12 & 7\end{array}$

Prerequisite: MEC 1103
Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, and advanced milling machine operations. Special procedures and operations, processes, and equipment; observing safety procedures faithfully; and establishing good work habits and attitudes acceptable to the industry.

| MEC | 1105 | Machine Shop Theory and Practice | 3 | 0 | 15 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MEC 1104
Stresses the development of skills and understanding of machine precision parts. Advanced machine processes are taught using the standard machine tools as well as specialized or production equipment as applicable. Methods and procedures of checking and inspecting precision parts. Good housekeeping and safe working habits stressed at all times.
MEC

Class $\mathbf{1 1 0 6}$ Lab \begin{tabular}{c}
Clinical/ <br>
Shop

 

Credit <br>
Hours
\end{tabular}

| MEC | 1107 | Jigs and Fixtures | 2 | 0 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Develops understanding of principles and uses of jigs and fixtures. Instructions in designing and drawing simple jigs and fixtures, as well as practice in their manufacture for use on course projects. Development of confidence and pride in producing high quality parts with the use of jigs and fixtures.

## $\begin{array}{lllllll}\text { MEC } & 1112 & \text { Machine Shop Processes } & 1 & 0 & 3 & 2\end{array}$

Acquaints students with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and lathe tools, and setup work applied to the trade.

## $\begin{array}{lllllll}\text { MEC } & 1115 & \text { Metallurgy: Ferrous Metals } & 2 & 3 & 0 & 3\end{array}$

Investigates the properties of ferrous metals and tests to determine their uses. Instruction includes some chemical metallurgy to provide background for the understanding of the physical changes and causes of these changes in metals. Physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steel, surface treatments, alloy of special steel, classification of steels, and cast iron are the topics for study.

## $\begin{array}{lllllll}\text { MEC } & 1116 & \text { Metallurgy: Non-Ferrous Metals } & 2 & 3 & 0 & 3\end{array}$

Prerequisite: MEC 1115
Continuation of the study of physical metallurgy. Study of the non-ferrous metals: bearing metals (brass, bronze, lead), light metals (aluminum and magnesium), and copper and its alloys. Power metallurgy, titanium, zirconium, indium, and vandium included.
$\begin{array}{llllllll}\text { MEC } & 1120 & \text { Duct Construction and Installation } & 3 & 0 & 6 & 5\end{array}$
Study of the fabrication, installation, and maintenance of ducts using various materials and fittings to achieve correct air flow. Course covers safety, fabrication, tools and equipment, cutting and shaping, fasteners and fabrication practices, fans, insulation, ventilating hoods, layout methods, and development of duct systems. The student will study the installation of various duct systems and perform on-the-site modifications.

## MEC 1133 Electrical and Mechanical

 $\begin{array}{lllll}\text { Maintenance } & 3 & 0 & 6 & 5\end{array}$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 machine installation including location, leveling, and fastening are covered. The use of precision measuring tools and checking for accuracy, squareness and correct center line distances is stressed for pre-start inspection.

| MEC | 1134 | Class | Lab | Clinical/Credit <br> Shop | Hours |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Maintenance |  |  |  |  |  |

Prerequisite: MEC 1133
A study is made of those parts of the electrical code which affect the work of the industrial maintenance electrician. Practical experience is provided in wiring, installing, and connecting the various types of services for lighting, heating, and power installations. Training is provided in troubleshooting in the identification and testing of circuits and in making mechanical adjustments and related maintenance operations of various machines. Schematic diagrams showing the plan of operation for each system, electrical or mechanical, are used.

## MEC 1140 Hydraulics and Pneumatics

 $\begin{array}{llllll}\text { Fundamentals } & 3 & 0 & 3 & 4\end{array}$Basic theories and uses of hydraulic and pneumatic systems and also the combination of systems. Basic designs and functions of circuits and motors, controls, electro-hydraulic servo-mechanisms, filtration, accumulators, and reservoirs. Installation and maintenance of the components will be made by the students.

## MEC 1147 Systems of Measurement

 $\begin{array}{llllll}\text { and Measuring Tools } & 2 & 0 & 0 & 2\end{array}$Study of measurement and the various systems. How to use and read the various rules, scales, calipers, micrometers, and other precision measuring tools used in mechanical work. Included is the reading of the basic electrical meters used in testing.

| MEC | 1221 | Machine Maintenance | 2 | 0 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Fundamentals of repairing machine tools and related equipment or accessories. Emphasis on manufacture of replacement parts; alignment or adjustment of pulleys, gears, gibs, and clutches; and modification or restoration of older equipment.

## MEDICAL

MED 1100 Hospital Ward Clerk Theory and Practice $9 \quad 0 \quad 21 \quad 16$

Designed to prepare qualified students to perform a variety of clerical duties such as maintaining the patient's charts, requesting equipment and services for the patient, requesting supplies and equipment for the nursing unit, and completing all forms correctly. Emphasis placed on communication techniques including communication with the patient via the nurse-patient intercom, communication with the hospital staff, physicians, and visitors, as well as telephone communications. Clinical experiences provide opportunities for applying classroom learning in the hospital setting.

## MENTAL HEALTH

| MHA | 116 | Group Processes III | 1 | 3 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Final formal group experience. Attention given to the development of the students' abilities to communicate with others as well as to facilitate communication between others.

MHA 131, 132, 133 Readings in Mental Health $\quad$\begin{tabular}{c}
Class <br>
Lab

 

Clinical/ Credit <br>
Shop
\end{tabular}

Designed for students who wish to specialize or expand their knowledge in certain areas of mental health. Under the supervision of mental health faculty members, students study materials relative to concepts in mental health and write critical analyses. Time for independent study allotted, and individual conferences with the supervising instructor arranged.
$\begin{array}{llllll}\text { MHA } 201 \text { Mental Health Care } & 4 & 3 & 0 & 5\end{array}$
Prerequisite: HSA 100
Orientation to the policies, procedures, and practices commonly accepted in mental health institutions; an introduction to basic patient care principles and techniques in meeting the needs of patients during observation, ambulation, and mildly mentally ill stages. Lab experiences present practice in basic patient care under the direction of a faculty member.
$\begin{array}{lllllll}\text { MHA } 208 & \text { Change Agentry Lab I } & 0 & 3 & 0 & 1\end{array}$
A four-day human relations training lab in a retreat setting off campus. Lab staffed by qualified trainers. Students are offered practice in the interpersonal and group skills they have learned in courses in Group Processes.
$\begin{array}{lllllll}\text { MHA } & 209 & \text { Treatment Modalities } & 2 & 4 & 0 & 4\end{array}$
Analysis and application of the major approaches to psychotherapy and counseling, involving theory, characteristics, and techniques.

## MHA 210 Change Agentry Lab II $0 \begin{array}{llll}\mathbf{0} & 3 & 0 & 1\end{array}$

Prerequisite: HSA 112 or HSA 113 or HSA 116 or permission of the instructor.
A four-day human relations training lab which occurs in a retreat setting off-campus. The lab is staffed by qualified group leaders and the students are afforded an experience to practice the interpersonal and group skills they have learned in HSA 112, HSA 113, or HSA 116.
$\begin{array}{lllllll}\text { MHA 210P Practicum III } & 0 & 6 & 0 & 2\end{array}$
Students placed six hours per week in an agency to obtain job experience relaced to course work; supervised by qualified agency personnel.
$\begin{array}{lllllll}\text { MHA 211P Practicum IV } & \mathbf{1} & 6 & 0 & 3\end{array}$
Students assigned six hours per week in a faculty-supervised clinical situation for application of knowledge and skills from related course work.

## MHA 215 Mental Health Seminar <br> 22 <br> 0 <br> 3

In-depth review of current issues and trends within the field of mental health. Students expected to demonstrate the knowledge and experience gained in previous study and training in group conferences and oral reports.
$\begin{array}{lllllll}\text { MHA 215P Practicum V } & 1 & 6 & 0 & 3\end{array}$
A continuation of MHA 211P.


#### Abstract

Clinical/ Credit Class Lab Shop Hours

\section*{MHA 216 Advanced Helping Skills:} Training and Practice 20

3 Prerequisite: Group Process courses, permission of instructor An intense experience for professional helpers in learning and mastering specific and effective interpersonal skills required by the helper-helpee model. The skills of attending, responding, personalizing, initiating, and communicating are included. After this base is built, the trainees practice the skills of problem definition, goal setting, value clarification, alternative selection, and evaluation. Trainees will receive immediate and ongoing feedback from role-playing exercises via videotapes, peers' observation, and trainer's comments. Size of class limited to 20 to insure maximum learning. $\begin{array}{llllll}\text { MHA } 225 & \text { Crisis Intervention } & 3 & 0 & 0 & 3\end{array}$ Designed to introduce students to basic theories and principles of crisis intervention from a historical as well as practical orientation. Provides students with necessary skills in crisis intervention since practical application is correlated with theory. Allows students to prepare themselves emotionally and psychologically to handle emergency crisis situations.

MHA 231, 232, 233 Research in Mental Health $0 \quad 2 \quad 2 \quad 0 \quad 1$ Designed for students who wish to specialize or expand their knowledge in certain areas of mental health. Under the supervision of mental health faculty members, students investigate and study materials and data from primary and secondary sources relative to concepts in mental health and prepare reports in the style appropriate to the discipline.


## MUSIC

MUS 150 Music Appreciation 3 0 0
Introduces music: Its elements, forms, and stylistic features. The music of major composers is studied, with emphasis on development of aural awareness.

## NURSING

| NUR | 101 | Fundamentals of Nursing | 6 | 6 | 0 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Fundamentals of Nursing being the foundation of all subsequent courses introduces the student of nursing to the concept of wellness and to the patient and his environment. The course focuses on principles and techniques in the performance of skills by the nurse in meeting the needs common to all patients, stressing body mechanics, medical and surgical aspesis, and other supplementary nursing functions. Nursing care plans, recording, and observational skills are introduced. The learning center and nursing laboratory are used for practice and development of skills, as well as the local hospital.

## NUR 102 Medical-Surgical Nursing I

8015
13
Prerequisites: NUR 101, BIO 101, NUT 101, MAT 114
Introduces the student to the area of medical-surgical nursing. Symptoms of illness, classification of diseases, pre- and post- operative care, long term illness, and rehabilitation are included. Nursing the patient with circulatory and respiratory disorders, cancer, and the dying patient are covered. Clinical time is spent in the medical-surgical departments of the hospital with additional learning experiences provided in the emergency room, operating room, and recovery room.

|  |  |  | Clinical/ Credit |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| NUR | 103 | Medical-Surgical Nursing II | 9 | 0 | 15 | 14 |

Prerequisites: NUR 102, 110
Continuation of study of disorders by body systems; covers causes, diagnosis, treatment, and nursing care of these disorders. Communicable diseases of the adult and disaster and emergency nursing are included. Clinical assignment will be on medicalsurgical units of local hospitals, with additional learning experiences provided in the emergency room, operating room, and recovery room.
$\begin{array}{lllllll}\text { NUR } 104 & \text { Maternal-Child Health Nursing } & 8 & 0 & 15 & 13\end{array}$
Prerequisites: NUR 102, 110
The maternity component of Maternal-Child Health Nursing focuses on modern aspects of maternity care and understanding of fundamental physiology of human reproduction. There is a thorough presentation of prenatal, labor and delivery, and postnatal care. Emphasis is on normal pregnancy and delivery. Complications affecting the normal process are presented. The pediatric component introduces the student to the etiology, treatment, and nursing care of common and acute disorders and illnesses that affect the infant, child, and adolescent.

| NUR 110 | Pharmacology | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequsites: NUR 101, MAT 114
Corequisite: NUR 102
Presents students with facts concerning sources, effects, legalities, and usage of therapeutic agents. Conversion between systems, prescriptions of medications, drug classifications, and nursing implications are covered. Prepares the student to administer medications and compute dosages.

## $\begin{array}{llllll}\text { NUR } 131 \text { Nursing Seminar } & 3 & 0 & 0 & 3\end{array}$

Corequisite: NUR 103 or NUR 104
Comprehensive presentations of the practical nurse's ethical and legal responsibilities, professional organizations, and the history of nursing. Job opportunities are explored in depth. Continuing education after graduation is stressed; preparation for licensing examination is included.
$\begin{array}{llllllll}\text { NUR } & 201 & \text { Advanced Maternity Nursing } & 3 & 0 & 8 & 6\end{array}$
Prerequisite: Graduation from the Practical Nurse Education Program
Family-centered experience designed to prepare students to incorporate into nursing practice the psychological concepts and family relationships that affect the quality of nursing care. Encompasses the normal and important abnormal aspects of the maternity cycle with special emphasis placed on the abnormal pregnancy and intensive care of the premature infant. Clinical experiences are planned to meet clinical objectives and to guide each student toward developing abilities in identifying nursing problems, implementing care, and evaluating results. Experiences are provided in the general hospital, doctors' offices, and in selected community agencies.

| NUR | 202 | Psychiatric Nursing | 6 | 0 | 15 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: Graduation from the Practical Nurse Education Program, PSY 150 Conceptual and developmental approach to the nurse's role in the care of patients, both mentally and physically healthy and ill. Emphasis placed on cognizance and utilization of self as a therapeutic tool and development of verbal and nonverbal communication skills. Also emphasizes knowledge and identification of personality and behavior deviation experienced by the mentally ill patient, including etiology, treatment, prevention, and rehabilitation of mental illness. Learning experiences are derived in a state mental hospital and other community mental health related facilities.

NUR 203 Clinical Nursing I $\quad$ Class | Clinical/ Credit |
| :---: | :---: | :---: | :---: | :---: |
| Lhop |

Prerequisite: Graduation from the Practical Nurse Education Program Corequisite: BIO 201
Focuses on planned nursing care as a basis for nursing practice. Emphasis placed on planning care that is individualized and concerned with the total needs of the patient. Emphasis also placed on increasing the nursing student's ability to plan, coordinate, and implement nursing care. Continuing emphasis placed on the conceptual study of the biological, social, emotional, and rehabilitative components of illness as they relate to the ages and stages of development of the adult and child. Clinical learning experiences designed to meet clinical objectives. Experiences are provided in the general hospital.
$\begin{array}{llllll}\text { NUR } 204 & \text { Clinical Nursing II } & 6 & 0 & 16 & 11\end{array}$
Prerequisite: NUR 203
Conceptual study of the biological and the emotional components frequently occurring in illnesses of adults and children. Implementation of the management of patient care within the role of the Associate Degree Nurse is stressed. Opportunity is provided for using previous knowledge as well as that acquired concurrently in planning and implementing nursing care. Nutrition, pharmacology, history, and legal aspects of nursing are integrated in course content and clinical experiences. Planned clinical learning experiences are selected on the basis of meeting clinical objectives in accordance with the students' needs. Experiences are provided in the general hospital, doctors' offices, and in selected community health agencies.

| NUR 205 | Clinical Nursing III | 5 | 0 | 18 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: NUR 204, BIO 202
Continuation of conceptual study of the biological and the emotional components frequently occurring in illnesses of adults and children. Concentrates on increasing the nursing student's ability to use cognitive, affective, and psychomotor skills in meeting the needs of the adults and children exposed to the stress of more complex medicalsurgical problems. Special emphasis is placed upon the concepts of rehabilitative and adaptive processes. Students given the opportunity to plan, direct, and evaluate total patient care of individuals and groups. Continuing emphasis is also placed on providing an opportunity for application and reinforcement of previously acquired knowledge as well as that acquired concurrently in planning and implementing nursing care. Clinical learning experiences are selected on the basis of meeting clinical objectives and in accordance with the students' needs. Experiences are provided in the general hospital, doctors' offices, and in selected community agencies.

## NUR 231 Nursing Seminar

3
Corequisite: NUR 205
Introduces some of the problems encountered by the nurses as they make the change from student to staff nurse. Reviews legal and ethical responsibilities and points out current trends in the nursing profession. Students expected to present problems for discussions and do special research on problems encountered and approaches for use as problem solving techniques. Stresses avenues for continued learning after graduation.

Adapted to meet the special problems of individual students. Program of guided activities in the library, learning center, or nursing laboratory to improve or enhance students' nursing skills and knowledge.

|  |  | Clinical/ Credit |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| NUR | 1100 | Class | Lab | Nurse Assistant Theory and Clinical |  |  |
| Practice |  |  |  |  |  |  |

Designed to prepare qualified men and women to give effective bedside nursing care to selected patients. Students are taught the role of the nurse assistant, concepts of health and illness, functional relationships within the nursing care facility, fundamentals of effective interpersonal relationships, basic nursing procedures related to the daily needs of patients, and selected special procedures. Clinical experiences in hospitals and nursing homes provide students with the opportunity to apply the techniques learned in the classroom.

## NUTRITION

NUT 101 Basic Nutrition | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisite or Corequisite: BIO 101 or by permission of department chairperson Science of normal nutrition. Includes the study of nutrients, how they are used by the body, sources and types of food necessary for the balanced diet in developmental and ethnic variations, and physiological processes of digestion, absorption, and metabolism. Introduction to special diets.

| NUT | 102 | Food for Children | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of nutritional needs and food habits of young children through application of research findings. Practical experience in food service management for feeding children is included as group and individual projects.

## ORIENTATION

| ORI 100 | Freshman Seminar | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Includes an orientation of the policies and philosophy of Pitt Community College and stresses study techniques, decision-making, educational and career planning, and student services. Designed to provide students with sufficient information to successfully complete a program of study.
$\begin{array}{llllllll}\text { ORI } & 101 & \text { Interpersonal Relations Seminar } & \mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{1}\end{array}$
Designed to promote personal growth and develop a positive self-concept. Emphasizes verbal and nonverbal interaction in interpersonal communications. Social, cultural, and moral norms are discussed as experienced.
$\begin{array}{llllllll}\text { ORI } & 150 & \text { Orientation and Study Skills } & \mathbf{1} & \mathbf{0} & \mathbf{0} & \mathbf{1}\end{array}$
Provides information about the community college and its resources and assists in decision making and in developing sound study habits. Objective is to provide students with sufficient information to succeed in college.

## PHYSICAL EDUCATION

## $\begin{array}{llllllll}\text { PED } & 150 & \text { Foundations in Physical Education } & 2 & 0 & 0 & 2\end{array}$

Investigation of efficiency of human performance through study of variables related to total fitness, physical fitness, diet, weight control, degenerative diseases, physiological effects of exercise, and motor skills development. Oriented toward physical activity as a

Clinical/ Credit<br>Class Lab Shop Hours

way of life with emphasis upon the role that physical activity should play in leisure oriented societies; includes participation in physical activities.

| PED | 160 | Adapted Activities | 0 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: Permission of instructor.

| PED | 161 | Archery | 0 | 2 | 0 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PED | 162 | Badminton | 0 | 2 | 0 | 1 |
| PED | 163 | Basketball-Elementary | 0 | 2 | 0 | 1 |
| PED | 164 | Bowling | 0 | 2 | 0 | 1 |
| PED | 165 | Conditioning | 0 | 2 | 0 | 1 |
| PED | 166 | Modern Dance-Elementary | 0 | 2 | 0 | 1 |
| PED | 167 | Modern Dance-Intermediate | 0 | 2 | 0 | 1 |
| PED | 168 | Social Dance | 0 | 2 | 0 | 1 |
| PED | 169 | Square Dance | 0 | 2 | 0 | 1 |
| PED | 170 | Field Hockey | 0 | 2 | 0 | 1 |
| PED | 171 | Golf | 0 | 2 | 0 | 1 |
| PED | 172 | Ice Skating | 0 | 2 | 0 | 1 |
| PED | 173 | Jui-Jitsu and Karate | 0 | 2 | 0 | 1 |
| PED | 174 | Lacrosse | 0 | 2 | 0 | 1 |
| PED | 175 | Recreational Activities | 0 | 2 | 0 | 1 |
| PED | 176 | Soccer-Elementary | 0 | 2 | 0 | 1 |
| PED | 177 | Softball-Elementary | 0 | 2 | 0 | 1 |
| PED | 178 | Swimming-Elementary | 0 | 2 | 0 | 1 |
| PED | 179 | Swimming-Intermediate | 0 | 2 | 0 | 1 |
| PED | 180 | Tennis-Elementary | 0 | 2 | 0 | 1 |
| PED | 181 | Tennis-Advanced | 0 | 2 | 0 | 1 |
| PED | 182 | Track and Field | 0 | 2 | 0 | 1 |
| PED | 183 | Volleyball | 0 | 2 | 0 | 1 |
| PED | 184 | Wrestling | 0 | 2 | 0 | 1 |

## Clinical/ Credit <br> Class Lab Shop Hours

## PHILOSOPHY

$\begin{array}{lllllll}\text { PHI } 150 & \text { Introduction to Philosophy } & 5 & 0 & 0 & 5\end{array}$
Prerequisite: ENG 100R-4 or equivalent
Introduction to the study of philosophy through the examination of major philosophical problems.

## PHOTOGRAPHY

| PHO | 116 | Photography | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Introduction to the field of photography, photographic equipment, and materials. 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 217 | Photography | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: PHO 116
Advanced photographic techniques and materials. Participation in studio and laboratory procedures illustrating the various applications and creative possibilities of photography in advertising.

| PHO 218 | Special Problems in Photography | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Students pursue approved special interest problems under the guidance and supervision of the instructor.

| PHO | 219 | Special Problems in Photography | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Students pursue approved special interest problems under the guidance and supervision of the instructor.

| PHO | 220 | Special Problems in Photography | 2 | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Students pursue approved special interest problems under the guidance and supervision of the instructor.

## PHYSICS

| PHY | 101 | Technical Physics | 4 | 2 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Corequisite: MAT 102
Fundamental course covering several basic principles of physics. Typical topics include systems of measurement, Newton's laws of motion, energy, equilibrium conditions, and statics.

| PHY | 102 | Technical Physics | 4 | 2 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: MAT 102, PHY 101
Continuation of PHY 101. Typical topics include heat and thermodynamics of heat engines, wave motion, and sound.

|  |  | Clinical/ |  |
| :---: | :---: | :---: | :---: |
| Class | Lab | Shop | Hours |
| 4 | 2 | 0 | 5 |

## PHY 103 Technical Physics

Prerequisites: MAT 102, PHY 101
Continuation of PHY 102 with specific attention given to topics related to architecture. Acoustics, light and illumination, and electricity are typical topics covered.

PHY 104 Technical Physics $4 \quad 2 \quad 0 \quad 5$
Prerequisite: MAT 102, PHY 101
Continuation of PHY 102 with specific attention given to topics related to electronics. Rotary motion, simple harmonic motion, sound, and circuits are typical topics covered. Electricity and magnetism covered in detail.

## $\begin{array}{lllllll}\text { PHY } 107 & \text { Radiologic Physics } & 3 & 3 & 0 & 4\end{array}$

Prerequisite: MAT 101
Basic fundamentals: covers such areas as structure of matter, electric current, electrostatics, units of measurement, electro-dynamics, magnetism and electromagnetism, electric generators and motors, production and control of high voltage and rectification, $x$-ray circuits, $x$-ray tubes and rectifiers, and an introduction to therapy and nuclear medicine.

| PHY | 108 | Radiologic Physics | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: PHY 107
Complete application and review of radiologic physics. Focus on the multiple energy transformations required for radiation production, what radiation is, how radiation transports energy, mechanics of interaction with matter, and how radiation is measured.
$\begin{array}{llllllll}\text { PHY } & 120 & \text { Introduction to the Metric System } & 3 & 0 & 0 & 3\end{array}$
Involves familiarization with metric units and usage, conversions to and from the British Engineering System of units, and basic algebraic solutions for the unknown as applied to problems involving units.
$\begin{array}{lllllll}\text { PHY } 260 & \text { Physics and the Environment I } & 3 & 2 & 0 & 4\end{array}$
Prerequisites: ENG 100R-4 or equivalent
A conceptual physics course that relates some of the basic principles of physics to their uses and consequences in our world and lives. Major topics include motion, properties of matter, heat, and sound. This is a science course designed primarily for nonscience majors, hence the use of mathematics is deemphasized, being used occasionally to avoid wordiness in communicating a concept. Laboratory experiences are designed to reinforce the concepts discussed in class.

| PHY 261 | Physics and the Environment II | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: PHY 260
A continuation of PHY 260 dealing with electricity and magnetism, light, atomic physics, and nuclear physics. Concepts are again emphasized, and mathematical computations used only occasionally.

| PHY 262 | Solar Influences and Applications | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: MAT 101
A non-calculus, introductory course to the basic physics of how the sun physically influences the earth, and how this solar energy can be converted to other useful forms of energy.

PHY 1101 Applied Science $\quad$ Class | Lab |  | Clinical/ Credit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shop |  |  |  |  |

Prerequisite: MAT 1101
Introduction to physical principles. Core topics include systems of measurement, properties of matter, solids and their characteristics, work, energy, power, and simple machines. Additional specialized topics for the various curricula are basic properties of liquids, gases, heating and refrigeration, and electricity.
PHY 1101A Applied Science $\quad 2 \quad 0 \quad 0 \quad 2$

Prerequisite: MAT 1101
Introduction to systems of measurement and the properties of matter.

| PHY 1101B Applied Science | 1 | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: PHY 1101A
Work, energy, power, simple machines, and specialized topics are the areas covered. PHY 1101A and PHY 1101B together are equivalent to PHY 1101.

## $\begin{array}{llllll}\text { PHY } 1103 & \text { Principles of Electricity } & 3 & 2 & 0 & 4\end{array}$

Prerequisite: MAT 1101
Study of the electron theory, Ohm's Law, series and parallel circuits, AC and DC circuits, magnetism, and batteries as applied to the automobile ignition system.

## PLUMBING

$\begin{array}{lllllll}\text { PLU } 1110 & \text { Plumbing Pipework } & 3 & 0 & 9 & 6\end{array}$
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.

## POWER MECHANICS

PME 1010 Air Conditioning $\begin{array}{lllll}2 & 0 & 3 & 3\end{array}$
Basic principles of air conditioning and the special application of these principles to farm equipment. Maintenance, troubleshooting, and repair stressed.

PME 1030 Electrical Systems in Farm
$\begin{array}{llllll}\text { Equipment } & 3 & 0 & 3 & 4\end{array}$
Basic study of the electrical systems found in farm equipment. Special emphasis given to batteries, starters, generators, alternators, and ignition and lighting systems. Identification of trouble, servicing, and repair as applicable to electrical systems stressed.
$\begin{array}{lllllll}\text { PME } & 1040 & \text { Farm Harvesting Equipment } & 3 & 0 & 6 & 5\end{array}$
General maintenance and repair of harvesting equipment. Self-propelled grain combines and automatic tobacco harvestors given special attention in the classroom and in the field.

PME 1050 New Tractor and Equipment Setup $\begin{array}{llllll}1 & 0 & 3 & 2\end{array}$
Initial preparation of new tractors and equipment for customer delivery; unloading, assembling, and delivery of the tractor or equipment.

PME 1100 Engine Shop Practice Class Lab Shop Hours

Prerequisite: PME 1101
Designed for students who need additional shop time in order to achieve the objectives of PME 1101.

PME 1101 Internal Combustion Engine: $\begin{array}{lllll}\text { Gasoline and Diesel } 5 & 0 & 12 & 9\end{array}$

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

## $\begin{array}{lllllll}\text { PME } & 1102 & \text { Electrical Systems } & 5 & 0 & 12 & 9\end{array}$

Theory and operation of ignition, cranking, charging, lights, and accessories systems. The laboratory used to demonstrate various test equipment and electrical checks; students spend much lab time learning to use various pieces of auto electrical test equipment.

## $\begin{array}{llllllll}\text { PME } & 1104 & \text { Fuel Systems: Gasoline and Diesel } & 5 & 0 & 9 & 8\end{array}$

Designed to give students a solid background in the theory and operation of carburetors, fuel pumps, and the newer emission control devices; a working knowledge of the auto and diesel fuel systems. In laboratory training periods students disassemble various carburetors, perform tests, and adjust to specifications. All test equipment demonstrated to and used by students.

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 operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, and cooling systems; lubrication; and methods of testing, diagnosing, and repairing diesel engines.
$\begin{array}{lllllll}\text { PME 1105B Fundamentals of Diesel Engines } & 1 & 0 & 6 & 3\end{array}$
Prerequisite: PME 1105A
Continuation of practical application of principles introduced in PME 1105A.

| PME | 1112 | Foreign Car Fuel Systems | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Thorough study of the fuel systems of foreign cars, including the carburetor, fuel pump, and fuel accessories.

| PME | 1123 | Brakes, Chassis, and Suspension | 3 | 0 | 9 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Complete study of various braking systems employed on automobiles and lightweight trucks; emphasis on operation, proper adjustment, and repair. Servicing of power brakes emphasized. Principles and functions of the components of the automotive chassis. Practical job instruction in adjusting and repairing of suspension systems.

PME 1124 Power Trains $\quad$ Class |  | Clinical/ Credit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |  |

Comprehensive study of the principles of functions of the automotive power train. Includes study of the clutch, conventional transmission, drive shaft, and the rear axle assembly. Identification of trouble, servicing problems, and repair of the power train system covered.
$\begin{array}{llllll}\text { PME } 1125 & \text { Auto Servicing } & 3 & 0 & 9 & 6\end{array}$
Prerequisites: PME 1102, PME 1123, and AHR 1101
Emphasis on the shop procedures necessary in trouble-shooting the various component systems of the automobile. Troubleshooting of automotive systems provides a full range of experiences in testing, adjusting, repairing, and replacing components. Close simulation to an actual automotive shop situation will be maintained.
$\begin{array}{lllllll}\text { PME } & 1126 & \text { Small Engine Repair } & 1 & 0 & 3 & 2\end{array}$
Four-cycle air-cooled engines, ignition, fueling, cooling, and lubrication systems. Maintenance and repair emphasized both in theory and practice.

PME $1135 \begin{aligned} & \text { Basic Fuel Systems: Gasoline and } \\ & \text { Diesel }\end{aligned}$ Diesel $3 \quad 0 \quad 3 \quad 4$

Thorough study of the fundamentals of gasoline and diesel fuel systems. Lectures on carburetors and diesel principles and functions of components. Laboratory practice in application of service, repair, and diagnosis procedures. Assembly removal and replacement.

| PME | 1136 | Fundamental Hydraulics | 2 | 0 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Fundamental hydraulics and its use to transmit power. Study of components and their function; pumps, lines, cylinders, valves, gauges, and controls. Systems servicing, test points, testing, and adjusting. Proper care, use, installation, and storage of test equipment. Minor repairs, assembly removal, and replacement.
$\begin{array}{lllllll}\text { PME } & 1137 & \text { Basic Power Transmission } & 4 & 0 & 6 & 6\end{array}$
Basic fundamentals, function, and operation of major components used to transmit power on heavy equipment. Clutches, transmissions, planetary gearing, torque converters, final drives, differentials, and brakes. Servicing, testing, minor adjustment, assembly removal, and replacement.
$\begin{array}{lllllll}\text { PME } 1184 & \text { Practicum } & 0 & 0 & 39 & 13\end{array}$
Shop experiences under the supervision of a qualified shop foreman. Emphasis on the application of automotive servicing concepts and principles related to course content.
PME 1202 Electricity/Electronics
$30 \quad 9$
6

Thorough study of theory and operation of individual automotive electrical units. Analysis and repair of all automotive electrical components. To supplement the engine electrical course for first year students and help them develop a knowledge of transistor circuits and their application to conventional electrical components and circuitry.
$\begin{array}{lllllll}\text { PME } & 1204 & \text { Emission Controls } & 5 & 0 & 6 & 7\end{array}$
In-depth coverage of the operation of the P.C.V. System, exhaust emission control systems, evaporative emission control systems, and scheduled maintenance operations. All test equipment involved in diagnosing emission control problems is used by students.

PME 1224 Automatic Transmissions

| Class | Lab | Clinical/ <br> Shop | Credit <br> Hours |
| :---: | :---: | :---: | :---: |
| 5 | 0 | 12 | 9 |

Prerequisite: PME 1124
Automatic transmissions; instruction includes classroom study, demonstrations, and student participation in disassembly, reassembly, and testing of selected transmissions. Special emphasis is placed on principles, function, construction, operation, servicing, and trouble-shooting procedures and repair of various types of automatic transmissions.
$\begin{array}{lllllll}\text { PME } & 1227 & \text { Power Accessories } & 2 & 0 & 6 & 4\end{array}$
Designed to acquaint students with the operation, service, and repair of power operated seats, windows, tops, windshield wipers, and radio antennas. Course should insure the development of students' abilities to understand and trace out the circuits of the electrical accessories and enhance skills in diagnosing trouble and repairing damaged circuits. Application of knowledge in drawing and reading schematic diagrams of electrical circuits.

## PME 1230 Auto Service Excellence Test

 Review $\quad 5 \quad 0 \quad 0 \quad 5$Complete review of all the eight tests given to auto mechanics for certification by the National Institute for Automotive Service Excellence. Particular attention given to test taking techniques.

## POLITICAL SCIENCE

| POL 102 | National Government | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

English and colonial background, the Articles of Confederation, and the framing of the Federal Constitution. The nature of the Federal union, state rights, Federal power, political parties. The general organization and functioning of the national government.
$\begin{array}{llllllll}\text { POL } 103 & \text { State and Local Government } & 3 & 0 & 0 & 3\end{array}$
A study of state and local government, state-Federal interrelationships, and the functions and prerogatives of the branches. Problems of administration, legal procedures, law enforcement, police power, taxation, and revenues and appropriations. Special attention given to North Carolina.

POL 150 Introduction to U.S. Government $\begin{array}{llllll}5 & 0 & 0 & 5\end{array}$
Prerequisite: Specified score on reading placement test or ENG 100R-4
American national government with emphasis on its origins, development, structure, and functions.

## POLICE SCIENCE

PSC 102 Criminology 3 0 0

Survey of the historical and contemporary theories associated with the underlying causes of criminal behavior.

|  |  | Clinical/ Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PSC | 103 | Penology | Class | Lab | Shop | Hours |

Study of the historical development of the U.S. prison systems and survey of contemporary methods employed by the North Carolina Youth Development Commission, Parole Board, Probation Commission and the Corrections Department.

| PSC | 110 | 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the factors contributing to juvenile delinquency and evaluation of the methods employed in delinquency control. Special attention given to the role of juvenile agencies and to the legal procedures utilized in dealing with offenders.
$\begin{array}{lllllll}\text { PSC } 201 & \text { Patrol Procedures } & 4 & 2 & 0 & 5\end{array}$
Overview of techniques and procedures employed in routine patrol and traffic control.

| PSC | 202 | Police-Community Relations | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Study of the need for good community relations and the methodology employed in achieving these objectives by criminal justice agencies.

## PSC 213 Identification Techniques <br> $3 \quad 20$ <br> 4

Survey of contemporary identification techniques with primary emphasis on fingerprinting. Students develop skills in taking and classifying rolled impressions and in developing latent lifts through lab practice.

| PSC | 240 | Firearms and Defensive Tactics | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: Admission to a Criminal Justice program and permission of instructor or coordinator
Designed to develop respect for the needs, use, and legal liabilities associated with all firearms. Range practice provided with emphasis on the service revolver. Instruction also given in use of non-lethal weapons and in defensive tactics as used in handling arrested persons.

## PSYCHOLOGY

PSY 101 Introduction to Psychology $\quad 5 \quad 0 \quad 0 \quad 5$

Overview of the general characteristics of human behavior, including motivation, learning, perception, emotion, and intelligence, with emphasis on the application of scientific methods of psychological investigation and on the biological basis of behavior and experience. Special emphasis placed on behavior disorders and mental retardation in an attempt to help students apply the content of this course to job responsibilities.

PSY 102 General Psychology | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

A general survey of psychology: The scientific method, learning development, psychopathology, social psychology, mental health, intelligence, and personality will be topics for discussion. Practical application of information to self and others will be stressed.

PSY 102H General Psychology (Health Related $\begin{array}{llllll}\text { Professions) } & 3 & 0 & 0 & 3\end{array}$
A general survey of psychology: The scientific method, learning development, psychopathology, social psychology, mental health, intelligence, and personality will be topics

# Clinical/ Credit <br> Class Lab Shop Hours 

for discussion. Practical application of information to self and others will be stressed. Emphasis will be towards applying information to the health services professions.

| PSY | 103 | Adolescent Psychology | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: PSY 102
Study of the nature and source of the problems of adolescents in western culture. The physical, emotional, social, intellectual, and personality development of adolescents.


#### Abstract

PSY 104 Human Relations 3 0 0


A study of methods of communication and the practitioners' understanding of themselves and others. The practitioner-patient relationship is stressed. Topics include therapeutic communication, death and dying, suicide, assertiveness training, and reduction of stress in ones own life.

PSY 115 Child Growth and Development: Prenatal-Early Childhood $3 \quad 0 \quad 0 \quad 0 \quad 3$
Study of the developmental sequence of the prenatal, infant, and early childhood periods. Emphasis given to the factors influencing development and the importance of experiences in establishing patterns of behavior, attitudes, and interpersonal skills.

## PSY

116 Child Growth and Development:
Middle Childhood-Adolescence 3 0 0
Detailed study of the developmental sequences during middle childhood and adolescence; including the environmental and social factors which influence developmental rates, the formulation of behavior, and establishment of value systems and interests.

PSY 120 Human Growth and Development | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: PSY 102 H or PSY 150 or permission of department chairperson Basic principles of physical, cognitive, and psychosocial development of the individual from conception to death-the human life span. Emphasis also placed on the detection of abnormal developmental patterns from observations and on conveying this information to significant others.
PSY 150 General Psychology I $\quad 3 \quad 0 \quad 0 \quad 3$

Prerequisite: Specified score on reading placement test or ENG 100R-4
Survey of fundamental principles of human behavior. Includes personality, learning, development, motivation, intelligence, scientific method, psychopathology, and social psychology.

| PSY | 151 | General Psychology II | $\mathbf{3}$ | 0 | 0 | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: Specified score on reading placement test or ENG 100R-4
Second half of survey of psychology. Includes physiological psychology, sensation, perception, and altered states of consciousness: sleep, thinking, memory, motivation, emotion, stress, and sexuality.

PSY $160 \quad \begin{aligned} & \text { Psychology of Memory and } \\ & \text { Learning }\end{aligned}$
50000
Prerequisites: PSY 150, PSY 151 or permission of instructor
A survey of the basic research and methods, beginning theory, and general principles of learning. This will include the topics of forgetting and memory storage and retrieval.

|  |  |  | Class | Lab Clinical |  | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Hours |  |  |
| PSY | 170 | Child Psychology |  | 5 | 0 | 0 | 5 |

Prerequisites: PSY 150, PSY 151 or permission of instructor
The study of the growth and development of children from conception through adolescence with emphasis on the pre-pubescent child.

PSY 206 Applied Psychology 3 | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{3}$ |
| :--- | :--- | :--- | :--- |

Study of the psychological principles that help in understanding interpersonal relations in daily life. Attention given to personal and group dynamics so that students may apply the principles of mental hygiene to adjustment problems as students, workers, and members of the general community. Applications of psychological principles studied in relation to handling crisis situations dealing with stress, changing habits, and functioning in family life.
PSY 211 Behavior Disorders $\quad 5 \quad 0 \quad 0 \quad 5$

Prerequisite: PSY 101 or PSY 150
Study of general patterns of abnormal behavior with emphasis on biological and environmental causal factors and human coping mechanisms.

PSY 220 Psychology of Learning $\quad$| 5 | 0 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Study of the teaching-learning process with introduction of major theories and scientific findings relative to how children learn.
PSY 221 Learning and Behavior $\quad 3 \quad 4 \quad 0 \quad 0 \quad 5$

Prerequisite: PSY 150
Introduction to the basic learning principles and concepts required to explain the acquisition and maintenance of behavior. Emphasis placed on positive and negative reinforcement, punishment, extinction, shaping, fading, chaining, recording, and charting behavior. Self-modification conducted by each student.
PSY - 222 Exceptionality $\quad 5 \quad 0 \quad 0 \quad 0$

General concepts of intellectual, sensorial, motor, speech, and social variability among individuals.
$\begin{array}{lllllll}\text { PSY } & 225 & \text { Tests and Measurements } & 3 & 0 & 0 & 3\end{array}$
Prerequisite: PSY 150
Study of the principles of psychological testing, general intelligence tests, differential testing of abilities, and measurement of personality traits.

PSY 228 Abnormal Psychology | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{3}$ |
| :--- | :--- | :--- | :--- | :--- |

Provides instruction in mental hygiene, in the underlying causes of drug addiction and alcoholism, and in recognizing and dealing with abnormal individuals.
$\begin{array}{llllllll}\text { PSY } & 230 & \text { Psychology and Physiology of Aging } & \mathbf{3} & \mathbf{0} & \mathbf{0} & \mathbf{3}\end{array}$
Survey course intended to develop awareness of the inevitability of aging as part of the normal life cycle. Surveys the physical, psychological, and social changes occurring in late middle age and old age with emphasis on the care and treatment of the aged in our society.
PSY 1101 Human Relations $\quad 3 \quad 0 \quad 0 \quad 3$
Study of basic principles of human behavior. Problems of the individual studied in relation to society, group membership, and relationships within the work situation.
Class Lab Clinical/ Credit

## RADIOLOGIC TECHNOLOGY

RDT 101 Radiologic Technology I 4 |  | 2 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Orientation to the field of radiologic technology, including darkroom chemistry and film processing, the basic principles of radiologic exposure, elementary patient care procedures, introduction to medical terminology, and introduction to radiographic positioning as applied to those systems covered under BIO 107.

## $\begin{array}{llllll}\text { RDT } & 102 & \text { Radiologic Technology II } & 4 & 3 & 0\end{array}$

## Prerequisites: RDT 101, BIO 107

Radiographic principles and basic radiographic positioning necessary to perform diagnostic studies of the systems studied under BIO 108. Further patient care procedures and medical terminology included.

RDT 103 Radiologic Technology III $4 \begin{array}{lllll} & 4 & 0 & 5\end{array}$
Prerequisites: RDT 102, BIO 108
Techniques for basic views of the system taught under BIO 108, such as soft tissue radiography and fluoroscopy, and preparation of the patient and contrast media for these studies.

## RDT 111 Clinical Education 2 0 $\quad 6 \quad 4$

Education in a clinical setting including processing of radiographs, and practice in ethical and attitudinal situations during patient contact. Covers patient care, basic positioning for studies of upper and lower extremities, shoulder and pelvic girdles, introduction to thoracic and abdominal viscera, preparation of the patient for studies, and performance of examinations of the urinary system. Students also apply some of the simpler principles of radiographic exposure. Regular sessions of film critique.

## RDT 112 Clinical Education 10001506

Prerequisite: RDT 111
Education in a clinical setting; students continue to improve basic skills in darkroom technique and patient positioning for routine studies taught under BIO 107 and RDT 101. Practice of techniques for roentgenographic studies of the systems studied under BIO 108. Regular sessions of film critiques.

| RDT 113 | Clinical Education | 1 | 0 | 24 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: RDT 112
Education in a clinical setting with emphasis on the preparation and use of contrast media, preparation of the patient for such studies, and the performance of examination of the digestive tract, biliary tract, and urinary tract using contrast media. Students gain experience in fluoroscopic procedure and also make radiographs of the abdominal and thoracic viscera without the use of contrast media. Soft tissue radiography (exclusive of mammography) and location of foreign bodies touched upon. Regular film critique sessions.

| RDT 114 | Clinical Education | 1 | 0 | 33 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: RDT 103, 113
Student spends entire quarter gaining clinical education and developing skill in the techniques of those procedures covered during the first three quarters. Regular film critique sessions.

RDT 201 Topographic Anatomy $\quad$ Class | Lab | Clinical/ Credit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |  |  |

Prerequisites: BIO 107, 108
Review of anatomy from the standpoint of topographic anatomy and the relationship of organs to each other. Stress is upon the location of each organ using surface landmarks and relation of the organ to other organs within the same anatomic regions.

## RDT 204 Radiologic Technology IV 4 3 $\begin{array}{lllll} & \end{array}$

## Prerequisite: RDT 103

Continuation of the radiologic technology series; radiation protection, equipment maintenance and trouble-shooting. More advanced work in the radiography of the skeleton and in the art of pediatric radiology included. Special views and techniques for diagnostic radiology of the skeleton emphasized.
$\begin{array}{lllllll}\text { RDT } 205 & \text { Radiologic Technology V } & 4 & 3 & 0 & 5\end{array}$
Prerequisite: RDT 204
Special radiographic procedures. Areas to be covered include photo fluorography; bronchography, mammography, sialography, pelvimetry, and vascular procedures. Emphasis directed toward all requirements necessary for performing these procedures, including equipment and methodology utilized.

| RDT 206 | Radiologic Technology VI | 4 | 0 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: RDT 205
Study of radiobiology with emphasis on the effects of ionizing radiation in the human body. The use of radiation and radioactive materials in nuclear medicine and radiation therapy considered along with protective measures.

## $\begin{array}{lllllll}\text { RDT } 208 & \text { Radiologic Technology VII } & 6 & 0 & 0 & 6\end{array}$

Prerequisite: RDT 206
Devoted to a complete review of all subject matter covered during program. Emphasis on discussion of knowledge obtained during rotation through minor affiliates.

## $\begin{array}{llllll}\text { RDT } 215 & \text { Clinical Education } & 1 & 0 & 39 & 14\end{array}$

Prerequisite: RDT 114
Education in clinical area; radiography of the skeleton, the thoracic and abdominal viscera, and examination of the abdominal viscera using contrast media and fluoroscopy. Emphasis placed on ability to do pediatric radiography and views for radiography of the skeleton.

RDT 216 Clinical Education $\begin{array}{lllll}1 & 0 & 24 & 9\end{array}$
Prerequisite: RDT 215
Emphasis placed on ability to assist and perform procedures studied in RDT 205. Students required to show proficiency in all of these areas.

| RDT 217 | Clinical Education | 1 | 0 | 36 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisite: RDT 216
Students rotate for a two-week period through each minor affiliate, the Nuclear Medicine Department at the major affiliate, and the special procedures area at the major affiliate to gain knowledge in specialized procedures, nuclear medicine, radiation therapy, and advance imaging modalities.

|  |  | Clinical/ Credit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RDT | 218 | Clinical Education | Lab | Shop | Hours |

Prerequisite: RDT 217
Students complete rotation through minor affiliates and specialized areas in major affiliates.
$\begin{array}{llllllll}\text { RDT } & 219 & \text { Review of Radiologic Technology } & 3 & 0 & 0 & 3\end{array}$
Systematic approach to the review of fundamental radiologic technology theory designed to facilitate the preparation of the graduate radiologic technologist for the written examination. Students encouraged to participate in group discussions, and thus share knowledge, information, and clinical experiences, thereby broadening their base of knowledge.

## RELIGION

REL 150 Introduction to Religion $\quad 5 \quad 0 \quad 0$

Prerequisite: Specified score on reading placement test or ENG 100R-4
Survey of the major religions of the world: Judaism, Zoroastrian religion, Christianity, Islam, Hinduism, Buddhism, Sikkhism, Jainism, Confucianism, Taoism, and Shinto.

REL 160 Introduction to Old Testament $\begin{array}{llllll}\text { Literature } & 5 & 0 & 0 & 5\end{array}$

Study of the Old Testament, with consideration of relevant cultures, history, and major personalities.
REL 161 Introduction to New Testament $\quad 5 \quad 0 \quad 0$

Study of the New Testament, focusing on the major teachings of Jesus, the major teachings of the apostle Paul, and the later writings. Special attention paid to the various books' similarities and dissimilarities; to the historical, cultural and religious background; and to the compilation of the New Testament.

## REAL ESTATE

$\begin{array}{lllllll}\text { RLS } & 101 & \text { Fundamentals of Real Estate } & 2 & 4 & 0 & 4\end{array}$
Survey course designed to provide both the beginner and the practitioner with a basic knowledge of real estate. Includes the basic aspects of real estate ownership, contracts, financing, closing, licensing, mathematics, brokerage, land use, property management, and law of agency. Successful completion and meeting attendance requirements of this course qualifies students to take the North Carolina Real Estate Broker's Examination.

## SOCIOLOGY

| SOC | 101 | Introduction to Sociology | $\mathbf{5}$ | 0 | 0 | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Presents the scientific study of human behavior in relation with others, the general principles affecting the organization of such relationships, and the effects of social life on human personality and behavior. Emphasis is placed on the principles of sociology relating to societies in general and particularly American society, cultures, social institutions, groups, and organizations, the class system, social change, and social processes.

SOC 102 Principles of Sociology $\quad$ Class | Clinical/ Credit |  |
| :---: | :---: | :---: | :---: | :---: |
| Shop | Hours |

Study of the principles of sociology; attempts to provide an understanding of culture, collective behavior, community life, social institutions, and social change. Presents the scientific study of human behavior in relation with others, the general principles affecting the organization of such relationships, and the effects of social life on human personality and behavior.

SOC 102H Principles of Sociology
(Health Professions) 3 0 0
A study in the principles of sociology, attempting to provide an understanding of culture, collective behavior, community life, social institutions, and social change. Presents the scientific study of human behavior in relation with others, the general principles affecting the organization of such relationships, and the effects of social life on human personality and behavior. Throughout the course, principles and concepts are related to the health professions.

SOC 103 Social Problems $\begin{array}{lllll}3 & 0 & 0 & 3\end{array}$
A study of the social problems prevalent in contemporary society with emphasis on the nature of, origins of, and solutions to these problems.

## SOC 150 Sociology I 5000005

Prerequisite: Specified score on reading placement test or ENG 100R4
Nature, concepts, and principles of sociology. Presents the scientific study of human behavior in relation to others, the general principles affecting the organization of such relationships, and the effects of social life on human personality and behavior. Special attention paid to modern industrial societies in general and American society in particular. Includes society, culture, socialization, groups, institutions and organizations, the class system, social change, and social processes.
sOC 160 Courtship and Marriage $\quad 5 \quad 0 \quad 0 \quad 5$

A course which introduces students to critical thinking and empirical knowledge relative to affectional involvement, the family, and the roles and relationships associated with each.

## SOC 170 Modern Social Problems 5000005

Prerequisite: SOC 150 or permission of instructor
An in-depth study of current social problems in American society. Emphasis to be placed not only on the nature, extent, causes, and consequences of these problems but also the proposed solutions or means of limiting these problems.
SOC 221 Family
30
$0 \quad 3$

Study of the origin and development of the family as a social institution with emphasis on courtship, marriage, parenthood, family relationships, and problems of the contemporary American family.

## SPEECH

SPH 150 Voice and Diction
300
3
Improvement of articulation and pronunciation through drills, readings, and the delivery of simple speeches.

|  | Class | Lab | Clinical/ Credit <br> Shop | Hours |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPH | 160 | Public Speaking | 3 | 0 | 0 | 3 |

Composition, preparation, and presentation of speeches for all occasions.

## SOCIAL SCIENCE

$\begin{array}{llllllll}\text { SSC } & 101 & \text { Introduction to Social Sciences } & \mathbf{3} & \mathbf{0} & \mathbf{0} & \mathbf{3}\end{array}$
Integrated course in the social sciences, drawing from the fields of sociology, psychology, economics, and political science, introducing the student to the methods of social science and to the basic concepts used by social scientists to explain the functioning of the human world.

## SURGICAL

| SUR | 1102 | Surgical Safety and Orientation | 5 | 4 | 0 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Presents purpose of the program, its content, and its function. Importance of operating room organization, interdepartmental relations, and interrelations with other departments in the hospital. Includes medical terminology and symbols; transportation, positioning, and care of the patient in surgery; and ethical and legal responsibilities. Provides an introduction to other coordinated activities, including vital signs, respiratory maintenance, drainage tubes and catheters, and urethral catheterization. Prepares students for experience in emergency, recovery, and delivery room.

## $\begin{array}{llllllll}\text { SUR } & 1104 & \text { Introduction to Microbiology } & 3 & 0 & 0 & 3\end{array}$

Presentation of the basic principles of microbiology to aid students in understanding the relationship of microorganisms with the maintenance of health and the cause, control, and prevention of disease.

SUR 1114 Principles and Practices of $\begin{array}{lllll}\text { Operating Room Techniques } & 4 & 10 & 0 & 9\end{array}$
Introduction to the method of the preoperative surgical hand scrub, historical development of the surgical scrub, gowning, and gloving; aseptic techniques and the development of a "sterile consciousness"; types of drapes, proper handling of drapes, and the importance of proper draping. Various types, sizes, and uses of sutures; and different types, parts, and uses of needles used for suturing tissue. Types and uses of drains; types of basic instruments; and the classifications, uses, manufacture, and care of instruments. Study of specific responsibilities of the circulating and scrubbed personnel in routine and special procedures. Provides experience in both laboratory and hospital settings.

## SUR

1115 Pharmacology for Operating Room 2
200
2
Familiarizes students with the drugs and agents used in surgery and during surgical procedures. Also deals with the basic mathematics and measurements needed to handle drugs in a surgical situation.

SUR 1116 Surgical Procedures and Clinical Practice I
$9 \quad 0 \quad 18$
Introduction to the various types of incisions used in performing surgery. Relationship between supplies and equipment in the preparation for surgery. Regional anatomy of the operative site. Introduction to surgical procedures including instruments; general

# Clinical/ Credit <br> Class Lab Shop Hours 

surgery; and general abdominal, gynecological, obstetrical, thoracic, genitourinary, and orthopedic surgery. Provides hospital clinical experience applying all principles with rotations in set-up areas, work rooms and delivery and emergency rooms. Beginning scrub experience.

## SUR 1127 Surgical Procedures and Clinical Practice II

$9 \quad 0 \quad 24$
17
Relationship between supplies and equipment in the preparation for surgery. Regional anatomy of the operative site. Introduction to surgical procedures including eye, ear, nose, throat, plastic, neurosurgery, and cardiovascular. Pediatric and geriatric surgery; diagnostic procedures; radiation therapy; plaster casts; treatment of burns; and special instruments and equipment. Clinical rotation with more advanced scrubbing experience.
$\begin{array}{llllllll}\text { SUR } & 1128 & \begin{array}{l}\text { Surgical Specialties and Clinical } \\ \text { Practice III }\end{array} & 4 & \mathbf{0} & 33 & \mathbf{1 5}\end{array}$
Continuation of SUR 1127 with emphasis on advanced surgical procedures. Also includes case studies and seminars. Provides mostly clinical applications with operating room call experience.

| SUR | 1130 | Review of Surgical Technology | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Complete review of all subject matter covered in the Surgical Technology program in preparation for taking the national certifying exam.

## WELDING

WLD 120 Oxyacetylene Welding $2 \begin{array}{lllll}0 & 3 & 3\end{array}$
Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice in puddling and carrying the puddle; running flat beads; butt welding in the flat, vertical, and overhead position; brazing; and hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 121 Arc Welding | 2 | 0 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Operation of AC transformers and DC motor generator arc welding units. Studies made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After students are capable of running beads, they make butt and fillet welds in all positions, and test them in order to detect weaknesses in welding. Safety procedures are emphasized through the course in the use of tools and equipment.
$\begin{array}{llllllll}\text { WLD } & 122 & \text { Commercial and Industrial Practice } & 2 & 0 & 3 & 3\end{array}$
Prerequisites: WLD 120, 121
Designed to build skills through practices in simulated and actual industrial processes and techniques. Sketching and layout on paper of the size and shape description, listing the steps necessary to build the product, estimating time and material, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding, and nondestructive tests and inspection.
WLD 1102 Basic Gas Welding $\quad 0 \quad 0 \quad 3 \quad 1$

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling 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 | 1103 | Basic Arc Welding | 0 | 0 | 3 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Welding demonstrations by the instructor and practice by students in the use of the arc welding process to fabricate steel. Welded joints are discussed and welded in various positions. Care and maintenance of the arc welder are applied in this course.

## WLD 1112 Mechanical Testing and Inspection $1 \begin{array}{lllll} & 0 & 3 & 2\end{array}$

Prerequisites: WLD 1141, WLD 1142 or WLD 1120, WLD 1121
Standard methods for mechanical testing of welds. Students are introduced to the various types of tests and testing procedures and perform the details of the test which give adequate information as to the quality of the weld. Types of tests covered are destructive and nondestructive.

WLD 1120 Oxyacetylene Welding and Cutting $\begin{array}{llllll}3 & 0 & 12 & 7\end{array}$
Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice of puddling and carrying the puddle; running flat beads; butt welding in the flat, vertical, and overhead position; brazing; and hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.
WLD 1121 Arc Welding $\quad 3 \quad 0 \quad 12 \quad 7$

Operation of AC transformers and DC motor generator arc welding units. Studies made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After students are capable of running beads, they make butt and fillet welds in all positions, and test them in order to detect weaknesses in welding. Safety procedures are emphasized through the course in the use of tools and equipment.

## WLD 1122 Commercial and Industrial Practices $\begin{array}{llllll} & 3 & 0 & 9 & 6\end{array}$

Prerequisites: WLD 1141, WLD 1142 or WLD 1120, WLD 1121
Designed to build skills through practices in simulated industrial processes and techniques; and sketching and laying out on paper the size and shape, description, listing the steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding, and nondestructive tests and inspection.

# Clinical/ Credit <br> Class Lab Shop Hours 

equipment, operation, safety, and practice in the various positions. Thorough study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding.

WLD 1124 Pipe Welding $\begin{array}{lllll}3 & 0 & 12 & 7\end{array}$
Prerequisite: WLD 1121 or WLD 1142
Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

| WLD | 1125 | Certification Practices | 3 | 0 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: WLD 1123, WLD 1124; WLD 1141, WLD 1142; or WLD 1120, WLD 1121
Practice in welding the various materials to meet certification standards. Students use various tests including the guided bend and the tensile strength tests to check the quality of work. Emphasis placed on attaining skill in producing quality welds.

## WLD 1129 Basic Gas and Electric Welding $\quad 2 \quad 0 \quad 6$

Various processes used for joining materials by welding discussed. Lecture, demonstrations, and practice cover the oxyacetylene and arc welding processes, filler metals used, gases, currents, and weldability of metals. Instruction is given in the setup and safe operation of oxyacetylene and arc welding apparatus. Students prepare joints both by hand and by machine cutting with the oxyacetylene torch.

## $\begin{array}{lllllll}\text { WLD } & 1141 & \text { Beginning Welding } & 5 & 0 & 15 & 10\end{array}$

Introduction to the history of oxyacetylene and arc welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of unit. Operation of various AC transformers, AC and DC rectifiers, and DC motor generator arc welding units. Welding procedures such as practice of puddling and carrying the puddle; running flat beads; butt welding in the flat, vertical and overhead positions; and the cutting of straight lines with the torch. Safety procedures are stressed throughout the program of instruction.

| WLD | 1142 | Intermediate Welding | 5 | 0 | 15 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Review of basic oxyacetylene cutting and welding, preparation of metals, types of joints, welding procedures, and testing of the welds. Operation of AC transformers and DC motor generator arc welding machines. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After students are capable of running beads, they make butt and fillet welds in all positions and test them to detect weaknesses in welding. Safety procedures are emphasized throughout the course.

1. WHITE BLDG.
a. all administrative offices
b. student personnel
c. cooperative education
d. electronics
e. architectural drafting
f. learning center
g. bookstore
h. lounge
i. nursing
j. elc. data proc.
k. machinist
l. auto mechanics
m. radiology
n. surgical
2. HUMBER BLDG.
a. air \& water
b. business
c. police science
d. paralegal
e. agriculture
f. related
g. college trans.
h. library
i. continuing education
3. WHICHARD BLDG.
a. commercial art
b. human services
c. teacher assistant
d. carpentry
e. electrical inst.
f. heating, ref., air
g. auto mech.



TO LOCATIONS

4. METAL BLDG.
a. welding
b. elec. motor rep.
c. masonry



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Greenville, N.C.
Permit No. 299

## P.O. Drawer 7007

Highway 11 South Greenville, North Carolina 27834


[^0]:    **Elective credits should be selected based on the student's prospective teaching field.

[^1]:    TOTAL QUARTER HOURS65

[^2]:    Students who desire to complete the two-year advanced diploma program must first complete the four-quarter diploma program; then enroll full-time and complete the last three quarters, thereby earning an advanced diploma.

[^3]:    *Fee of $\$ 2.50$ per lab hour

