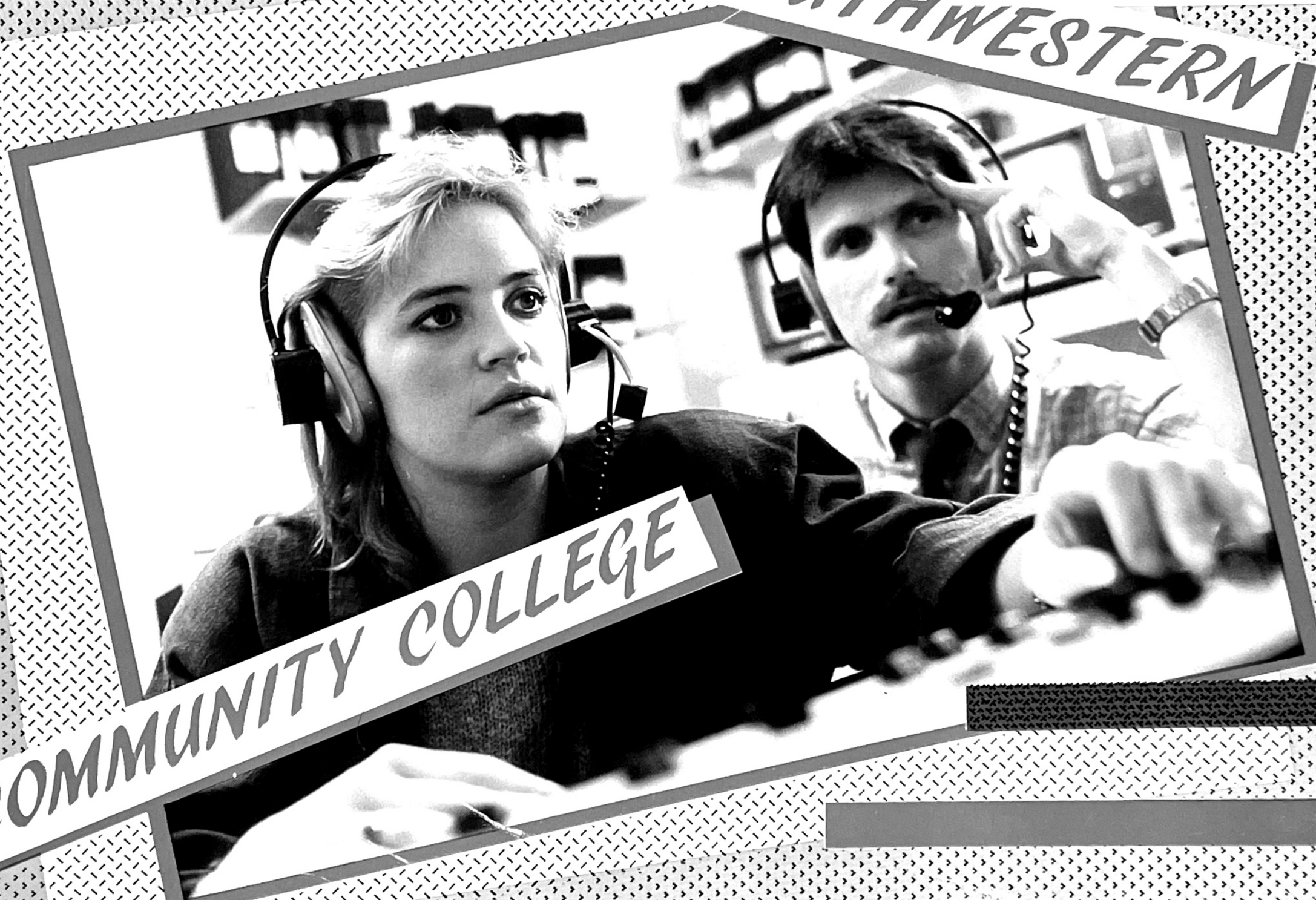
1988-91 CATALOG

SOUTHWESTERN COMMUNITY COLLEGE



NELDA REID

Southwestern Community College operates within the North Carolina Department of Community College system. The College is accredited by the Southern Association of Colleges and Schools. The College is also approved and recognized by the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, North Carolina Board of Cosmetic Arts, N.C. Board of Nursing, Committee on Allied Health Education and Accreditation of the American Medical Association, N.C. Standards and Training Commission, N.C. Sheriff's Standards and Training Commission, and Department of Interior National Park Service.

Southwestern Community College operates in compliance with Title VI of the Civil Rights Act of 1964. No qualified person shall, on the grounds of race, color, national origin, sex or age, be excluded from participation in, be declined the benefits of, or be subjected to discrimination under any program or activity.

The College complies with Section 504 of the Rehabilitation Act of 1973 and makes every effort to insure that handicapped persons are recruited, admitted and have equal access to all services and facilities.

Southwestern Community College issues this catalog to furnish prospective students and other interested persons with information about the college and its programs. Announcements contained herein are subject to change without notice and may not be regarded in the nature of binding obligations on the College or State. Not all courses listed in this catalog are offered each quarter. Class offerings are subject to enrollment. Course schedules for each quarter are listed in the tabloid distributed throughout the three county service area.

This catalog should not be considered a contract between Southwestern Community College and any prospective student. All charges for tuition and fees are subject to change as required by the Board of Trustees. Curriculum offerings may be altered to meet the need of individual departments. Policy and procedural changes approved by the Board of Trustees during the inclusive dates of the catalog will be considered as official addendums to the catalog.

Admission to any and all educational programs offered by Southwestern Community College is made without regard to race, creed, color, sex, religion, national origin, age, or personal handicap.

Southwestern Community College is an equal employment opportunity college.

SOUTHWESTERN COMMUNITY COLLEGE
SYLVA, NORTH CAROLINA 28779

CATALOG 1988-1991

AN INSTITUTION
OF
THE NORTH CAROLINA DEPARTMENT
OF COMMUNITY COLLEGES

Volume XXIII No. 1



Mailing Address: Southwestern Community College
275 Webster Road
Sylva, N.C. 28779-9578

Telephone Numbers: Jackson County, Sylva
704-586-4091 (Main Campus)
Swain County,
Bryson City 704-488-6413
Cherokee 704-497-7233
Macon County,
Franklin 704-369-7331

Visitors are always welcome at Southwestern Community College. The Student Services offices are open Monday through Thursday from 8:00 a.m. to 9:00 p.m. and Friday from 8:00 a.m. to 5:00 p.m. Visitors desiring interviews with members of the staff are urged to make appointments in advance.

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COLLEGE CALENDAR 1987-88

1987
FALL QUARTER
55 DAYS

Registration.....Tuesday, September 8
Professional Development Day and
Faculty/Staff Orientation.....Wednesday, September 9
First Day of Classes.....Thursday, September 10
Quarter Ends.....Wednesday, November 25

1987-88
WINTER QUARTER
55 DAYS

Registration.....Wednesday, December 2
First Day of Classes.....Thursday, December 3
Holiday Recess.....Monday, December 21-Friday, January 1
Quarter Ends.....Wednesday, March 2

1988
SPRING QUARTER
55 DAYS

Registration.....Tuesday, March 8
First Day of Classes.....Wednesday, March 9
Easter Break.....Friday, April 1-Monday, April 4
Quarter Ends.....Thursday, May 26
Commencement.....Thursday, May 26

1988
SUMMER QUARTER
50 DAYS

Registration.....Monday, June 6
First Day of Classes.....Tuesday, June 7
Independence Day Break.....Monday, July 4-Friday, July 8
Commencement.....Monday, August 22
Quarter Ends.....Monday, August 22

COLLEGE CALENDAR 1988-89

1988
FALL QUARTER
55 DAYS

Registration.....Thursday, September 1
Professional Development Day and
Faculty/Staff Orientation.....Friday, September 2
First Day of Classes.....Tuesday, September 6
Community College Faculty Workshop.....Monday-Tuesday,
October 17-18
Quarter Ends.....Wednesday, November 23

1988-89
WINTER QUARTER
55 DAYS

Registration.....Wednesday, November 30
First Day of Classes.....Thursday, December 1
Holiday Recess.....Monday, December 19-Monday, January 2
Martin Luther King Holiday.....Monday, January 16
Quarter Ends.....Friday, March 3

COLLEGE CALENDAR 1989-90

1989
FALL QUARTER
55 DAYS

Professional Development Day and
Faculty/Staff Orientation.....Tuesday, September 5
Registration.....Wednesday, September 6
First Day of Classes.....Thursday, September 7
Quarter Ends.....Wednesday, November 22

1989
SPRING QUARTER
55 DAYS

Registration.....Tuesday, March 7
First Day of Classes.....Wednesday, March 8
Easter Break.....Friday, March 24-Monday, March 27
Commencement.....Thursday, May 25
Quarter Ends.....Thursday, May 25

1989
SUMMER QUARTER
50 DAYS

Registration.....Monday, June 5
First Day of Classes.....Tuesday, June 6
Independence Break.....Monday, July 3-Friday, July 7
Commencement.....Monday, August 21
Quarter Ends.....Monday, August 21

1989-90
WINTER QUARTER
55 DAYS

Registration.....Wednesday, November 29
First Day of Classes.....Thursday, November 30
Holiday Recess....Thursday, December 21-Tuesday, January 2
Martin Luther King Holiday.....Monday, January 15
Quarter Ends.....Wednesday, February 28

1990
SPRING QUARTER
55 DAYS

Registration.....Tuesday, March 6
First Day of Classes.....Wednesday, March 7
Easter Break.....Friday, April 13-Monday, April 16
Commencement.....Thursday, May 24
Quarter Ends.....Thursday, May 24

1990
SUMMER QUARTER
50 DAYS

Registration.....Monday, June 4
First Day of Classes.....Tuesday, June 5
Independence Day Break.....Monday, July 2-Friday, July 6
Commencement.....Monday, August 20
Quarter Ends.....Monday, August 20

COLLEGE CALENDAR 1990-91

1990
FALL QUARTER
55 DAYS

Registration.....Thursday, August 30
Professional Development Day and
Faculty/Staff Orientation.....Friday, August 31
First Day of Classes.....Tuesday, September 4
Community College Faculty Workshop.....Monday-Tuesday,
October 22-23
Quarter Ends.....Wednesday, November 21

1990-91
WINTER QUARTER
55 DAYS

Registration.....Wednesday, November 28
First Day of Classes.....Thursday, November 29
Holiday Recess.....Monday, December 24-Friday, January 4
Martin Luther King Holiday.....January 21
Quarter Ends.....Thursday, February 28

1991
SPRING QUARTER
55 DAYS

Registration.....Tuesday, March 5
First Day of Classes.....Wednesday, March 6
Easter Break.....Friday, March 29-Monday, April 1
Commencement.....Thursday, May 23
Quarter Ends.....Thursday, May 23

1991
SUMMER QUARTER
50 DAYS

Registration.....Monday, June 3
First Day of Classes.....Tuesday, June 4
Independence Day Break.....Monday, July 1-Friday, July 5
Commencement.....Monday, August 19
Quarter Ends.....Monday, August 19





THE COLLEGE

Southwestern Community College is located on a beautifully landscaped, tree-lined, 57-acre tract of land on North Carolina Highway 116 in Jackson County. The College is situated on a rising hillside between Webster and Sylva. The College is centrally located to serve Southwestern North Carolina citizens. The campus is fifty miles southwest of Asheville, North Carolina and ninety miles southeast of Knoxville, Tennessee.

Southwestern Community College, which celebrates its 25th anniversary in 1989, was founded as an industrial education center in 1964, operating within the North Carolina Community College System. The College's service area is designated as Jackson, Macon and Swain counties, with the main campus located in Jackson County.

The College's campus facilities are designed to support a wide variety of instructional programs. The Learning Resources Center, completed in 1983, houses the College library and the media production center.

The College occupied the Regional Allied Health and Geriatric Training Center, a 74,000-square-foot building that houses a 1,200-seat conference center, administrative offices, classrooms and a dining room, in the Spring of 1988.

Today Southwestern Community College combines strong vocational-technical programs with general education and community service activities. Students can choose from many educational options which include completing requirements for one- and two-year programs which lead to direct employment in their chosen field or may transfer to four-year colleges.

BOARD OF TRUSTEES

Chairman
W. Paul Holt, Jr.

Vice Chairman
Charles Jerry Sutton

Governor's Appointment

W. Calvin Myers
Bryson City 1989

Mary Jane Ferguson
Cherokee 1991

Hattie Morris
Cherokee 1989

Charles Jerry Sutton
Franklin 1991

County Commission Appointment

Robert Blanton
Whittier 1989

Robert C. Carpenter
Franklin 1989

Catherine Dillard
Cullowhee 1991

Charles S. Slagle
Franklin 1991

Board of Education Appointment

W. Paul Holt, Jr.
Sylva 1991

Earl F. Hooper
Sylva 1989

William H. Smith
Sylva 1991

Jeanne Sneed
Bryson City 1989

Student Representative

President of Student Government Association



BOARD OF TRUSTEES MEMBERS, left to right, front row: Charles S. Slagle, Jeanne Sneed, Hattie Morris, and Symm H. McCord, II. Second row: William H. Smith, Calvin Myers, and W. Paul Holt, Jr. Third row: Robert C. Carpenter and Earl F. Hooper. Not pictured are: Catherine H. Dillard, Mary Jane Ferguson, Charles Jerry Sutton, and Robert Blanton.



PRESIDENT'S MESSAGE

If you are contemplating educational options for a career or vocation, we invite you to consider Southwestern Community College. Your decision will be one of the most important you will ever make. At Southwestern Community College we are committed to helping you make this decision. Here, you will find a dedicated faculty and staff ready to assist you as an individual with thorough placement testing and guidance toward programs designed to meet your talents and educational goals.

Our wide variety of vocational, technical, and general education programs are relevant to the constantly changing demands of today's world of work. Here, you will have the advantage of personalized attention in the classroom cloaked in the environment of a small two year college. Later, as you near graduation, you will benefit from the dedicated efforts of Southwestern Community College's Job Placement Office personnel.

We at Southwestern Community College are meeting the educational challenge of the present and goals of the future with enthusiasm. This zest for creative learning experiences combined with well equipped facilities are indicative of the many advantages the College provides.

In addition, Southwestern Community College provides opportunities for students to be actively involved in college life through the Student Government Association, Phi Theta Kappa Honor Fraternity, and a wide range of student activities.

Along with degree granting programs, Southwestern Community College has a strong continuing education program designed to meet a variety of special interest needs.

Whether you seek vocational, technical, general education or continuing education programs or classes, Southwestern Community College will open new doors for you toward the attainment of personal enrichment and more rewarding employment.

Norman K. Myers
President

STATEMENT OF PHILOSOPHY, MISSION AND OBJECTIVES OF SOUTHWESTERN COMMUNITY COLLEGE

The Philosophy of Southwestern Community College is that of total education of the individual. This includes a belief in the incomparable worth of all human beings, whose claims upon the State are equal before the law and equal before the bar of public opinion, whose talents (however great, or however limited or however different from the traditional) the State needs and must develop to the fullest possible degree.

Southwestern Community College, as a part of the North Carolina Community College System, should provide appropriate, economical and nearby learning opportunities for those beyond the normal high school age, or as otherwise provided by law, whether or not they are high school graduates. Depending on the individual needs and previous education, these opportunities should range from first grade level through the second year of college. Instruction should include vocational, technical, and general adult training to all of suitable age who wish to learn and who can profit from the instruction provided.

The mission of Southwestern Community College is to provide suitable, inexpensive learning opportunities convenient for any area individual of the appropriate age. These programs, courses and activities will better prepare individuals to join the labor market as new employees, qualify them for employment in new and existing industry, provide specific skills training, and encourage personal improvements, self-satisfaction, and an understanding of the responsibilities and privileges of citizenship.

Specifically stated, the mission objectives are to provide:

1. Educational opportunities for adults desiring to continue their education,
2. Technical and vocational programs for individuals desiring employment,
3. A program of general education for those who plan to further their education and pursue another degree,
4. Programs of vocational education for employed adults needing new training or re-training,
5. Learning opportunities for individuals desiring to enrich their lives and to continue personal growth, and
6. Educational testing, guidance and counseling to individuals in the three county area who have need of such services.



Admissions Information

ADMISSIONS INFORMATION

Admissions Policy

Southwestern Community College operates under the OPEN DOOR POLICY of the Department of Community Colleges. Students are accepted without regard to race, religion, sex, handicap, or national origin. Any person who is at least eighteen years of age or is a high school graduate or its equivalent may be accepted by the College.

Admission Requirements

Admission to degree programs requires a high school diploma or the equivalent. Admission to certain programs may have additional specific entrance requirements to assure, insofar as possible, student success and high quality instruction. Admission to diploma and/or certificate programs normally requires a high school diploma or the equivalent; however, applicants who demonstrate the ability and/or motivation to enter a diploma or certificate program may be admitted to the program concurrently with GED course enrollment. Students who interrupt their course of study must reapply. Readmission requirements are the same as the admission requirements for new students.

High school junior and senior class students sixteen years of age or older may be admitted to some courses at the College under certain conditions such as permission by public school officials or enrollment in special classes provided for under the Huskins Bill.

Admissions Procedures

1. Applicants to full-time curriculum programs
   a. Submit a completed admissions form to the Admissions Office.
   b. Have records of all previous education including GED, mailed directly to the admissions Office. Hand-carried copies of transcripts will be temporarily accepted. Official copies must be mailed to the College from the school providing transcripts. A copy of the high school transcript may, in some cases, be waived for a student who can provide an official transcript from another college which indicates that the basis of admission to that college was graduation from a specifically named high school.
   c. Take placement examination at SCC or submit SAT or ACT scores.
   d. Students entering a course or program of the College with academic deficiencies or low scores on required college placement examinations are required to enroll in remedial or other programs designated by the College.
2. Applicants for part-time credit or audit
   a. Submit a completed admission form to the Admissions Office.
   b. Students desiring to take English or mathematics classes must take the placement examination.

Change of Curriculum

Students wishing to change curriculums should submit a Change of Curriculum form or a new application, both available in the Admissions office.

Transfer of Earned Credit Between Institutions

Applicants for degree, diploma, or certificate programs who have attended other colleges, universities, or technical institutes, are responsible for having a transcript from each institution submitted directly to the Admissions Office. All courses with "C" grades or higher are customarily accepted if they are applicable

to the program selected at this college and if they were earned at an accredited college or university, at an institution within the North Carolina Community College System, or at an institution approved by the Executive Dean of Academic and Student Affairs.

Credits transferred to SCC from another institution will be recognized as hours toward the appropriate degree, diploma, or certificate but will not be calculated toward the cumulative QPR for that program.

Recipients of V.A. benefits must submit official transcripts of all post-secondary courses attempted before they can receive V.A. benefits. They are also urged to submit transcripts of any educational work completed through the armed services. Recipients of V.A. benefits will not receive such benefits if all post-secondary transcripts are not submitted.

Transfer Agreements with Other Colleges and Universities

Mars Hill College:

a. Accounting
b. Alternate Energy Technology
c. Associate Degree Nursing
d. Business Administration
e. Commercial Art and Advertising Design
f. Computer Technology
g. Drug and Alcohol Technology
h. Early Childhood Specialist
i. Electronic Data Processing
j. Electronics Engineering Tech.
k. Environmental Science
l. Foodservice Management
m. General Education
n. Law Enforcement/Criminal Justice
o. Medical Laboratory Technology
p. Paralegal Technology
q. Radio and TV Broadcasting Tech.
r. Secretarial Science

Western Carolina University:

Transfer of courses between SCC and WCU are approved on an individual basis.

University of North Carolina at Charlotte (UNCC):

UNCC will accept transfer credit from the following technical programs into the Bachelor of Engineering Technology Degree and Criminal Justice Degree programs:

a. Civil Engineering Technology
b. Surveying Technology
c. Computer Engineering Tech.
d. Electrical Engineering Tech.
e. Electronics Engineering Tech.
f. Instrumentation Technology
g. Criminal Justice — Protective Service Technology
h. Police Science

Licensing of Graduates

Southwestern Community College is an education institution and assumes no responsibility for the licensing of its graduates. Students convicted of a felony or any other crime involving moral turpitude may not be recognized by the proper licensing agency.

False Information

Applicants are expected to demonstrate honesty in the completion of all necessary forms. False information will be grounds for rejection or dismissal.





Academic Policies

ACADEMIC POLICIES

Attendance Requirements

All students are expected to be present and regular in attendance for scheduled classes and open labs. Absences will be considered justified and excusable only in cases of emergencies, serious illness, or death in the immediate family. Students may make up work missed at the discretion of instructors.

Probation

The Academic Probation and Suspension Policy applies only to students enrolled in curriculum programs.

A Requirement of a 2.00 QPR is necessary for graduation. Degree, diploma, and certificate seeking students performing below the minimum satisfactory level as determined by the schedule detailed below will automatically be placed on academic probation until they attain the minimum satisfactory level QPR. Probationary students are expected to work closely with their instructors, advisors, and counselors in order to improve their academic performances.

Probationary students will be required to limit their quarterly course load to less than 12 hours or as determined by the advisor and approved by the appropriate Associate Dean. Students may also be required, as appropriate, to enroll in developmental coursework.

The Cumulative Quality Point Ratio Schedule:

Cumulative Hours Attempted	QPR Satisfactory Level
6-25	1.50
26-40	1.75
41-more	2.00

Suspension

Probationary students who have not attained satisfactory progress levels will be suspended for one quarter at the end of three consecutive probationary quarters. They may, however, enroll the following quarter (or quarters) as a "Special Credit" student. During this suspension period they may take only developmental courses or retake courses in which they receive "D" or "F" grades. (Exception to this policy of courses which may be taken while on suspension will be made with the approval of the appropriate Associate Dean). Students may be readmitted to curriculum programs when their QPR's reach the satisfactory progress level, or they may be readmitted on probation after one quarter's suspension.

EXCEPTION: A student who acquires a quarterly QPR of 2.5 or higher during a probationary quarter and still has a cumulative quality point average below the minimum satisfactory level as shown in the schedule above may not be suspended but will remain on academic probation.

Pre-Registration

Pre-registration is generally held the eighth, ninth, and tenth weeks of the quarter. Pre-registration dates and procedures are prepared and distributed quarterly by the Dean of Student Personnel Services.

Registration

Registration is held each quarter on the day published in the academic calendar. Registration procedures are prepared and distributed quarterly by the Dean of Student Personnel Services.

Late Registration

A $5.00 late registration fee will be charged to returning students enrolled in a full-time curriculum program who register

after registration day, except those students who are enrolled in open laboratory programs. Registrations after the drop/add period must be approved by the appropriate associate dean.

Withdrawal Procedures

Official Withdrawal Procedure

A student must complete a Trial Registration Change Notice marked Withdrawal with his/her advisor and obtain signatures as indicated on the Trial Registration Change Notice. Then, the student must leave the completed Trial Registration Change Notice with the Registrar's office.

An Official Withdrawal entitles a student to a W, WP, or WF grade.

Administrative Drop

If a student fails to officially withdraw, the instructor/advisor must complete a Trial Registration Change Notice marked "Administrative drop" for the student and forward to the student's advisor, who then routes to the Registrar's office.

An Administrative Withdrawal results in a WF grade.

Change of Schedule

The drop/add period is the first five (5) class days of each quarter. Schedule changes are permitted during this time without grade penalty. Schedule changes are made on the Trial Registration Change Notice.

Degree Programs

Southwestern Community College confers an Associate of Applied Science Degree and an Associate Degree in General Education in the name of the State Board of Community Colleges upon successful completion of a technical curriculum.

Diploma Programs

Southwestern Community College confers diplomas in the name of the Southwestern Community College Board of Trustees upon successful completion of any vocational level curriculum four quarters or more in length (or the part-time equivalency).

Certificate Programs

Certificates will be issued in the name of Southwestern Community College to students who successfully complete an approved curriculum of less than four full quarters.

Cooperative Education

In keeping with its policy of offering new and enriching educational experiences to students, the college has introduced cooperative work experience in some of its curricula and will extend it to others. Cooperative Education (Co-op) is an educational program that combines classroom instruction with paid, practical, supervised work experience that is directly related to the student's curriculum. This combination of classroom instruction with on-the-job training is a meaningful way for students to learn, to gain valuable work experience, to make career choices, and to earn money while going to college.

Previously Earned Credits at SCC

Certain Vocational and Technical course work completed more than six (6) years prior to the awarding of a degree, diploma or certificate may be counted toward graduation only with the approval of the Executive Dean for Academic and Student Affairs.

Grading System

Official grades are issued for each student at the end of each quarter. Students enrolled in curriculum courses will be graded by the letter grade system and assigned a quality point ratio (QPR) for each quarter.

The QPR is determined by dividing the total number of quality points by the number of credit hours attempted.

A QPR of 2.00 is required for graduation. Transfer credits are not included in the QPR computation.

Grade	Definition	Quality Pts. per Qtr. Hour
A (93-100)	The student has, in a superior way, met the objectives established for the course.	4
B (85-92)	The student has more than adequately met the objectives established for the course.	3
C (77-84)	The student has adequately met the objectives established for the course.	2
D (70-76)	The student has minimally met the objectives established for the course.	1
F (Below 70)	The student failed to meet the objectives.	0
I	An I, or Incomplete, indicates that a student has been doing acceptable work in the course but has not completed all required work. A minimum of 80 percent of course requirements must have been completed for the student to be eligible for an I contract. It is the student's responsibility to have this deficiency removed in two weeks or the grade will automatically be changed to an F. An I does not count as hours attempted or as hours earned.	0
N	Given for Courses completed below 100 level. This symbol does not count as hours attempted or as hours earned.	0
R	An "R" grade indicates that a student must repeat coursework in the Student Success Center.	0
NA	The student registered, but never attended the class. This symbol does not count as hours attempted or as hours earned.	0
Au	Audit. This symbol does not count as hours attempted or as hours earned. Students will be permitted to change their registration from credit to audit only during the drop/add period.	0
W	The student withdrew during the first four weeks of the quarter. This symbol does not count as hours attempted or as hours earned. (Given at any time for extenuating circumstances as determined by the Executive Dean for Academic and Student Affairs.)	0
WP	The student withdrew after the fourth week or its equivalent while doing satisfactory work. This symbol does not count as hours attempted or as hours earned.	0
WF	The student withdrew after the fourth week or its equivalent while doing unsatisfactory work. Also to be used for students who fail to withdraw but do not attend class. This symbol counts as hours attempted but not as hours earned.	0
S	Credit by Exam. The student received credit for course through proficiency examination. This symbol counts as hours earned but not as hours attempted. Not more than one-half of the required credit for a degree or a diploma may be earned through a "Credit by Exam" unless otherwise approved by the Executive Dean for Academic and Student Affairs.	0

P	Passing — awarded upon successful completion of a Continuing Education Course, where CEU credit is involved and an 80 percent attendance requirement pertains.	0

Repeating Courses

Courses with earned grades of "D" or "F" may be repeated. Courses with earned grades of "C" or higher may be repeated only by special permission from the Dean of Instruction. When courses are repeated the grade and hours of the last course will be computed in the cumulative grade point average. The first course (grade and hours) will not be deleted from the transcript and will not be included in the cumulative grade point calculations.

President's List

1. Only full-time students are considered. (A full-time student is defined as a student enrolled in a curriculum program, carrying a minimum of 12 quarter hours.
2. The student is to have a minimum 3.85 quality point ratio to qualify for the quarter under consideration.
3. I, F, and WF grades will automatically eliminate a student from this list for that particular quarter. Credit for a course by examination or transfer does not affect eligibility.

Dean's List

1. Only full-time students are considered. (A full-time student is defined as a student enrolled in a curriculum program, carrying a minimum of 12 quarter hours.)
2. The student is to have a minimum quarterly 3.50 quality point ratio to qualify for the quarter under consideration.
3. I, F, and WF grades will automatically eliminate a student from this list for that particular quarter. Credit for a course by examination or transfer does not affect eligibility.

Honors

1. During the final week of the quarter, the Registrar's office is to rank the candidates for Associate Degrees or Diplomas according to their cumulative quality point ratio for the previous quarters of work.
2. The candidate with the highest cumulative QPR shall graduate *suma cum laude.*
3. The candidate with the next highest cumulative QPR shall graduate *magna cum laude.*
4. The next ten candidates in the ranking shall be graduated *cum laude,* except that no candidate with a cumulative QPR less than 3.85 shall be considered.
5. In the event of a tie in any of the categories, the candidates shall share in the honors.
6. When the selections have been determined by the Registrar's office the instructors of those selected are to be contacted to determine if the candidate is maintaining the same quality of work during the final quarter as during the previous quarters.
7. Candidates who are failing or doing poor work in the final quarter will be excluded from the list when the Registrar's office receives written notice from the instructors.
8. When a candidate is removed another shall be placed in the ranking provided there are remaining candidates with 3.85 QPR or higher.

Honors Banquet

Students who are named to the President's List, the Dean's List, or any combination thereof for both fall and winter quarters shall be invited to the Annual Honors Banquet to be held during the spring quarter.

Phi Theta Kappa

Phi Theta Kappa is the National Honorary Scholastic Fraternity of Community/Junior colleges.

The purpose of Phi Theta Kappa is the recognition and encouragement of scholarships and leadership among Community/Junior College students. To achieve this purpose, Phi Theta Kappa provides opportunity for the development of leadership and services . . . for an intellectual climate for exchange of ideas and ideals . . . for lively fellowship for scholars . . . and for stimulation of interest in continuing academic excellence.

To be considered for membership, a student must be (1) enrolled in a two year college, (2) be a full-time student, (3) have achieved a grade point average of 3.5, (4) have established academic excellence as judged by the faculty and (5) be of good moral character and possess recognized qualities of citizenship.

Faculty Advisors

Each student will be assigned an advisor. The purpose of this program is to provide each student with personal assistance in orientation and with guidance as he progresses in his course of study.

Credit by Examination

Advanced placement is offered to those students who because of their demonstrated abilities are qualified to accelerate their studies. To obtain advanced placement, a student may take a proficiency examination in certain subjects when he believes he already has mastery of the course material. Permission for such an examination must be obtained from the appropriate associate dean.

The examination may be written, oral, performance, or all of these. Students failing such an examination may not request a second examination until evidence of further study in the subject concerned is presented. The decision of the examining instructor will be final.

Credit may be granted for training received under any of the armed forces college training program, for specialized and technical training done under the auspices of the armed forces and courses taken through USAFI. Credit earned through CLEP is accepted where applicable.

Minimum Credits in Residence

In order for an Associate Degree to be awarded, a minimum of twenty-four (24) credit hours of course work must be completed in residence at Southwestern Community College, Sylva, N.C. Certain diploma and certificate programs require less credit toward residency requirements.

Application for Graduation

Between the first and the thirty-fifth class day of the quarter in which a student expects to complete requirements for commencement, the student must make application for graduation.

Candidate responsibility is as follows:

1. Obtain Application for Commencement at the Registrar's Office.
2. Complete candidate's section of the application.
3. Pay commencement fee and all debts owed to the College Bookstore/Cashier's Office.
4. Take commencement fee receipt to the Student Services Secretary for ordering of Degree-Diploma-Certificate.
5. Take application to advisor.

Note: Off-campus students obtain Application for Graduation from advisor and pay fees to advisor.

Candidates for commencement are required to participate in graduation exercises if they wish to receive their degrees, diplomas, or certificates.

Student Record Policy

Student records are maintained in accordance with the "Privacy Act of 1974." A copy of this law and the College's record policy is available for inspection in the College Library.

All questions concerning student records and all requests for record inspection should be directed to the Registrar's office.

Student Grade Appeal Policy

1. Student must appeal his/her grade to the Instructor of record within the following quarter. If not resolved—
2. Student may then appeal his/her grade to the appropriate Associate Dean. If not resolved—
3. (Final Step) Student may then appeal his/her grade to the Executive Dean for Academic and Student Affairs. The decision of the Executive Dean is final.



Student Services

STUDENT SERVICES AND STUDENT LIFE

Standards of Student Conduct

Each Southwestern Community College student is expected to conduct himself in such a manner as to uphold, not detract from the good name of the College and fellow students by full recognition of his responsibilities under the law and the moral and social standards of the community, state, and nation.

Students shall be responsible for the knowledge of the College rules and regulations as set forth in the College Student Handbook.

Orientation

At the beginning of each quarter, an orientation course is provided for new students to acquaint them with basic ideas, procedures, academic areas, administrative personnel and services of the College. The primary purpose for scheduling this course is to inform new students of important information about the College in an effort to assist them in making an easy transition to new surroundings.

Testing

Most majors at Southwestern Community College require the Placement Test. (The APS Test of The College Board e.g. Reading Comprehension; Written Expression; Computational Mathematics and, for certain programs, Elementary Algebra.) The only majors not required to take the placement test are nursing, medical laboratory technology, radiologic technology, and respiratory care technology. These Allied Health curriculums must pass the Allied Health Admissions Test. Test schedules can be obtained from the Director of Admissions. Foreign students must pass the T.O.E.F.L. exam with a minimum score of 500. The S.A.T. or A.C.T. can be substituted for either the placement tests or the admissions tests.

Counseling

In addition to the College's Career Center, counseling is offered for personal as well as academic problems. Counselors frequently act as a referral service for problems as diverse as housing, child care and tutoring needs. All counseling is confidential. A free peer tutoring program is available to individual students experiencing difficulty in any academic area.

Job Placement Office

The office provides the following services for students and graduates. While the College does not guarantee employment, every effort will be made to assist students and graduates with employment.

1. Films on resume writing, letter writing, and job interviews.
2. A current listing of jobs available in the area.

The office provides the following services for graduates only:

1. Resume Service — Students desiring to use this Placement Office Resume Service must submit their resumes to the Placement Office not later than the fifth week of the quarter in which they expect to graduate, submit updates in writing to the Placement Office to keep the resume correct, and request that copies of their resume be sent with transcript each time a transcript is requested.
2. Job Search Packet — This packet contains a "Job Seeking Skills Handbook".

Student Government

All students are encouraged to become involved in their Student Government Association. Elections for the Executive Council (The President; Vice President, Secretary; Treasurer; Chief Justice and Coordinator) are held in mid April. Elections for sophomore Senators are also held at this time. Elections for freshmen Senators are held in the Fall.

The Student Government Association promotes the general welfare of the College in a democratic fashion so as to facilitate communication between the student body, the faculty and the administration. The Student Government Association serves on most of the important standing committees of the College to provide the student viewpoint. The S.G.A. President is an ex-officio member of The Board of Trustees of Southwestern Community College. The S.G.A., through its Executive Council, the Senate and its various committees serves as a strong advocate for the students at the College as well as administering a complex and varied student activities program.

Activities

Southwestern Community College has a diverse program of student activities. The Student Government Association sponsors many concerts, outdoor events, convocations, trips, a movie series, and a lecture/demonstration series known as Lunch and Learn. Clubs exist in the areas of electronics, computer science, substance abuse counseling, and radiology, as well as the Phi Theta Kappa National Honor Society. The College is a member of the National Association for Campus Activities and the NCCCCSGA (The North Carolina Comprehensive Community College Student Government Association).

Learning Resources Center

The Learning Resources Center is located on the south end of the campus in a new energy efficient building of approximately 11,000 square feet. The facility includes capacity shelving for 40,000 volumes and seating space of 120 people. The building houses not only the book collection, periodicals, and audiovisuals, but also a conference room, projection and screening room, typing room, media production, printing, a darkroom, and project facilities.

The Learning Resources Center provides various types of print and nonprint media for students, faculty, and staff of the College. The Library has a continuously growing collection of approximately 22,000 volumes which are primarily scientific and technical, relating directly to the curriculum offerings. The reference collection contains encyclopedias and many specialized dictionaries and handbooks. Also a varied collection of fiction and books of general interest is provided for recreational reading and personal enrichment. The open shelf concept is used to provide for easy access to materials. The Library receives more than 220 magazines and newspapers.

The Learning Resources Center also provides other materials such as pamphlets and newspaper clippings. Included in the collection are bound volumes of magazines and microfilm of approximately 140 periodical titles. The Library also provides microfiche of several document titles and newspaper titles.

Many types of audiovisual materials and equipment are available through the Learning Resources Center. The audiovisual media include films, filmstrips, tapes, slides, transparencies, film loops, and video tapes. The materials may be used in the Center at the study carrels or in a classroom.

The Learning Resources staff of trained personnel is always willing to assist users in locating and using the various types of media.

All library materials must be returned by the end of each quarter and accounts cleared before students will be allowed to register, graduate, or receive a transcript.

The Learning Resources Center is open 8:00 a.m. to 9:00 p.m. Monday through Thursday and from 8:00 a.m. to 5:00 p.m. on Friday. The LRC serves not only faculty, staff, and students of Southwestern Community College but also residents of the community.

Media Services Department

The Media Services department does graphics, design, layout, paste-up, printing, collating, and binding of college brochures, forms, programs, posters, and handbooks. Media Services serves all the departments within the College. Other services include audio taping, video taping, splicing of tapes and films, black and white and color photography, and slide/tape show production.

Normal operating hours are from 8:00 a.m. to 5:00 p.m. Monday-Friday.

Public Information Office

The purpose of the Public Information Office is to inform the public about newsworthy events occurring at Southwestern Community College. News releases concerning the College, its faculty, staff and students are sent to area news media. In addition, the Public Information Office coordinates appearances by students, faculty and staff on local radio programs involving informative discussions of SCC programs and events. Students should contact the Public Information Office if they have news items they want released to the media. This is particularly relevant to students who live outside the SCC service area of Jackson, Macon and Swain counties.

Also, the Coordinator plans, organizes and promotes the SCC Speakers Bureau, utilizing the expertise of faculty and staff to present programs of interest to groups and organizations of Western North Carolina.

EXPENSES

TUITION AND FEES PER QUARTER

Full-Time Student Tuition	$ 75.00
Non-Resident Full-Time Student Tuition	702.00
Part-Time Student Tuition (per quarter credit hour)	6.25
Non-Resident Part-Time Student Tuition (per quarter credit hour)	58.50
Occupational Extension Student (per class)	15.00
Avocational Extension Student (per class)	25.00
Practical Skills Extension Student (per class)	20.00
Activity Fee (per quarter) - 12 credit hours	6.00
- 10-11 credit hours	5.50
- 7-9 credit hours	4.50
- 4-6 credit hours	3.00
- 0-3 credit hours	1.50

Exception: Curriculum students at Job Corps sites and those enrolled in the High School Cooperative (Huskins Bill) classes shall not be assessed Student Activity Fees.

Automobile Registration (per year)	1.00
Student Identification Card (per year - required for full time, optional for part-time)	1.00
Insurance (per year - optional)	7.75
Late Registration Fee	5.00
Graduation Fee (paid when student registers for his last quarter prior to graduation)	25.00

In addition to the above fees, students enrolled in certain programs are required to purchase additional supplies and materials.

The College does not provide for installment payments of fees and tuition.

Textbooks

Textbooks are available in the College Bookstore.

Establishing State Residency

To qualify for in-state tuition, legal residents must have maintained domicile in North Carolina for at least the 12 months

immediately prior to classification. Individuals must establish that their presence in the State during such 12 month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education.

Regulations concerning the classification of students by residence for purposes of applicable tuition differentials are set forth in detail in a "Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes." Copies of the manual are available for review at the Student Services office.

Students who believe that they have obtained eligibility for a change in classification must petition the Dean of Student Services for a decision. Changes in classification are effective with the beginning of the next quarter.

Refunds

Tuition refunds for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds of the student's tuition may be refunded if the student officially withdraws within 10 calendar days after the first day of classes as published in the College calendar. Tuition refunds will not be considered after that time. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less, unless a course or curriculum fails to materialize.

If a student officially withdraws within five (5) class days after the first day of classes, as indicated in the College calendar, or if a class fails to materialize, student fees totaling five dollars ($5.00) or more shall be refunded.

Payment of Tuition and Fees

Tuition and fees are due and payable at the time of the student's registration. Students unable to pay tuition and fees in full at registration may request from the Business Office a 10 calendar day deferment of full payment of tuition and fees. Students failing to pay in full by the end of the 10 day deferment period will be refused further admission to college classes.

No student will be permitted to graduate or register for a new quarter if he has an unpaid balance due or account from any previous quarter unless payment of such an outstanding balance has been guaranteed in writing by a financially responsible person or organization.

Any student experiencing special difficulties may make special arrangements with the Associate Dean for Business Services by following the above procedure.

In the event a student completes registration and withdraws before paying the appropriate fees and tuition, the institution will make three attempts during the current year by letter and personal contact to collect these funds. If the institution is unsuccessful, the account will be turned over to the North Carolina Attorney General's office for disposition.

FINANCIAL AID

Information and applications for all Student Financial Aid Programs are available from:

Student Financial Aid Office
Southwestern Community College
275 Webster Road
Sylva, N.C. 28779

Office hours are 8:00 a.m. to 5:00 p.m. daily. The telephone number is (704) 586-4091.

Eligibility

With the exception of a few scholarships, all financial aid at the College is awarded to eligible students on the basis of financial need. Financial need is defined as the difference between the amount of money a student and his family can provide for an education and the cost of the education. The need is greater for some, less for others, and financial aid is meant to fill the need gap, whether it be great or small.

In order to identify those students with financial need and to determine their needs in a systematic manner, the College utilizes the two national need analysis systems: The College Scholarship Service (Financial Aid Form) and the American College Testing (Family Financial Statement) (FAF Preferred).

Requirements For Receiving Financial Aid

Students must meet the following criteria in order to receive Financial Aid:

1. Be currently enrolled at Southwestern Community College, or be accepted for enrollment on at least a half-time basis (6 credit hours per quarter) in a curriculum program.
2. Be either a U.S. citizen or an eligible non-citizen.
3. Demonstrate financial need.
4. Be making satisfactory progress in the program he/she is pursuing.
5. Not be in default on Perkins Loan (or National Direct Student Loan [NDSL]), Guaranteed Student Loan, or PLUS/SLS Loan.
6. Not owe a refund on a Pell Grant or a Supplemental Educational Opportunity Grant.
7. Must sign a statement of updated information certifying that specific items on the Student Aid Report (SAR) are correct.
8. Must sign a statement of educational purpose saying that federal student aid funds will be used only for expenses related to attending SCC.
9. Must sign a statement of Selective Service registration status indicating that registration has been completed, if required to do so. The U.S. Department of Education will verify students' registration status with the Selective Service. The name of any student who claimed to have registered but has not will be referred to the U.S. Department of Justice.

Financial Aid and Veteran Administration Policy

Satisfactory Progress

A curriculum student is making satisfactory progress, for the purpose of continuing financial aid, if the cumulative quality point average meets the standards of the College Academic Suspension/Probation Schedule. A student performing below the minimum satisfactory level as determined by the schedule will automatically be placed on probation for the following quarter. At the end of the probationary quarter, all financial aid will be suspended if the cumulative QPR is still below the minimum satisfactory level. Financial aid will be reinstated once the necessary QPR is achieved. Incompletes, withdrawals, non-credit courses and/or repetitions will be reviewed on an individual basis. Students may not pursue a degree for more than 14 (fourteen) quarters and continue to receive financial assistance.

Policy for Packaging Financial Aid

A PELL Grant is usually the Foundation of an aid package. Composition of the package is dependent upon program enrollment, class schedule, and funds available. SEOG is awarded in addition to PELL, and CWSP, to those students with exceptional financial need.

Repayment Policy

Students receiving financial aid who withdraw from the College are responsible for repaying any overpayment which may result. Overpayment letters will be written to students stating the amount of the overpayment.

Financial Aid Transcript

A Financial Aid Transcript must be on file for all aid applicants who have previously attended other post-secondary institutions, regardless of whether or not aid was received.

Financial Aid Programs

Pell Grants

PELL Grants are funds to help undergraduates pay for their education after high school. These grants provide a foundation of financial aid, to which aid from other federal and non-federal sources may be added. Unlike loans, grants do not have to be repaid.

Awards are made depending upon eligibility as determined by a standard formula approved by congress. Half-time and three-quarter time students will receive a portion of the total award. Special credit and students attending less than half-time are ineligiblie to receive a PELL Grant.

N.C. Student Incentive Grant Program

Legal residents of North Carolina accepted for enrollment 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 either the College Scholarship Service or American College Testing. 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. The deadline to apply for a NCSIG is March 15.

Supplemental Educational Opportunity Grants

This program provides grants to students with exceptional financial need, who, for the lack of financial means of their own or of their families, would be unable to enter or to remain at the College. Grants, ranging from $150 to $1,000 are available to a limited number of students. Supplemental Grants do not have to be repaid.

College Work-Study Program

This is a program of employment in which students are compensated for the number of hours they work for the College or an off-campus agency. Students who are employed in this program may work up to 20 hours per week while attending classes full-time. During vacation periods, when students are not in school, they may work up to 40 hours per week. On-campus jobs can include work in offices, shops, libraries, and maintenance.

The present rate of pay is $3.35 per hour. Students approved for this program can expect to complete, in addition to the award letter, all necessary employment documentation.

College Foundation Incorporated Loan Fund

Legal residents of North Carolina who are enrolled or have been accepted for enrollment in an eligible college, university, technical or vocational school on at least a half-time basis and show demonstrated financial need are eligible to apply. Applicants must meet certain academic requirements as related to their course of study. Students in good standing may reapply each year that additional funds are needed. Students are required to attend a borrowers' conference before additional loans will be approved.

Application for the program are available upon request by writing:

College Foundation, Inc.
P.O. Box 12100 Glenwood Avenue
Raleigh, N.C. 27605

Unto These Hills Educational Fund, Inc.

The fund was established in memory of the late Suzanne M. Davis, who was costume designer for "Unto These Hills." The organization was chartered as the Suzanne M. Davis Educational Fund, Inc. In December, 1979, the name of the organization was changed to Unto These Hills Education Fund, Inc. The fund is supported financially by interest earned from the endowment fund, the Cherokee Historical Association, and others who have contributed to the fund.

Amount: Scholarships awarded will be in the amount of $500.00 each.

Eligibility: Scholarships are available only to students for undergraduate study. Scholarships are available only to students who are enrolled members of the Eastern Band of Cherokee Indians, Cherokee, North Carolina; or, to students whose parent(s) are enrolled members of the Eastern Band of Cherokee. The student must provide the committee with information to establish tribal enrollment.

James G. K. McClure Fund

The Health Careers Scholarship Program of the James G. K. McClure Educational and Development Fund is to aid financially deserving and academically promising residents in Western North Carolina to enter the Licensed Practical Nursing Program. Evidence of Christian character and the desire to be of service to one's fellowman are considered of basic importance in the selection of the recipients.

Greenebaum Scholarships

The James G. K. McClure Educational and Development Fund provides a scholarship, given by the family and friends of the late Edward De Zulueta Greenebaum, for residents of Jackson County. Awards are based upon scholarship, financial need and recommendations.

Fred B. Holcombe Scholarship

The Fred B. Holcombe Scholarship Endowment Fund was established in honor of Fred B. Holcombe, retired sheriff of Jackson County. One academic year's tuition will be awarded to a student who is enrolled in the Criminal Justice program at SCC. First priority is given to students from Jackson County.

Robert B. Willard Scholarship

The Robert B. Willard Scholarship Endowment Fund was established in memory of SCC faculty member, Robert B. Willard. One academic year's scholarship will be awarded to a student who has completed or is in the process of completing one course in developmental or remedial math or English.

Plato A. Cox Memorial Scholarship

The Plato A. Cox Memorial Scholarship is a one year scholarship established by his family to be awarded to a graduate of the Blue Ridge School in Glenville, N.C.

It is awarded on the basis of financial need, academic promise and personal initiative.

Ad Club Scholarship

The Western North Carolina Advertising Club sponsors a scholarship for a second-year student enrolled at the College in the Commercial Art and Advertising Design Program.

Contel Scholarship

Established by Contel Telephone for area high school graduates. The scholarship, valued at $500 per year (renewable), is to be awarded by the SCC Scholarship Committee. The scholarship will be awarded to a student planning to transfer to a four year college to earn a Bachelor's degree, and who demonstrates academic potential.

Tommy Love Memorial Scholarship

The scholarship will pay tuition for one year for a deserving graduate of Sylva-Webster High School.

William B. Dillard Memorial Scholarship

Established in honor of Mr. W. B. Dillard, a Founder of Southwestern Technical College, by his family and friends. This scholarship is awarded to eligible students of western North Carolina.

Harold's Supermarket Scholarship

This program provides a scholarship each year for employees of Harold's Supermarket or their children. If there are no applications in the above category, then the scholarship is open to anyone from Jackson County who demonstrates a financial need.

Macon County Retired Teachers Association Nursing Scholarship

This scholarship will pay tuition for one year for a Macon County student entering the Nursing Program at Southwestern Community College.

Southwestern Community College Foundation Scholarship

The Southwestern Community College Foundation Student Aid Program is designed to complement the present aid program operated by the College. Applications may be obtained from the Financial Aid Office.

North Carolina Community College Scholarship Program

The State Board of Community Colleges provides fifteen $400.00 scholarships to SCC each year. Among the factors considered in the selection process are need, scholastic achievement and participation in institution and community activities.

Wachovia Technical Scholarship

Provided through the Department of Community Colleges, the Wachovia Scholarship is available to full-time students in their second year of a curriculum program. The two $500.00 scholarships are awarded on the basis of financial need, scholastic promise, and prior performance at the College.

Programs Administered by Other Agencies

Information and applications are available upon request from the individual agencies who administer the program.

North Carolina Division of Rehabilitation

The College is approved for the training and education of individuals who qualify under the provisions of the North Carolina Division of Vocational Rehabilitation, Department of Public Instruction.

Social Security Administration

Eligible persons may receive educational benefits from the Social Security Administration if the head of the household is over 62 and retired or disabled.

Bureau of Indian Affairs

Educational assistance is provided to the Cherokee Indians through the Bureau of Indian Affairs, Cherokee, North Carolina.

Job Training Partnership Act

JTPA is available to a limited number of students. This program is administered through the local Employment Security Commission.

Application For Financial Aid

Students desiring financial aid are encouraged to apply early (January-March) to be given top priority for the funds available. Applications will be processed until all available funds are awarded. It is necessary to reapply for financial aid each year.

In order to be considered for grants, loans, scholarships, and work-study jobs, the applicants must complete and submit either

a Financial Aid Form (FAF) or a Family Financial Statement (FFS) to the processing agency listed on the form. The results of the FAF/FFS are mailed directly to the Financial Aid Office. There is a processing fee for this service.

Financial aid applicants must apply for the PELL Grant. This is accomplished by completing either the FAF or the FFS. PELL results are mailed directly to the student in the form of a Student Aid Report which the student must send to the Financial Aid Office without delay. To apply for a PELL grant only, a Federal Financial Aid Form should be filed.

Upon receipt of the FAF/FFS and PELL grant results, the Financial Aid Office will review this data and the applicant's financial award will be determined. An official award letter explaining the award decision and giving information about the aid offered is then sent to the applicant. In order to accept the financial aid award, the applicant must sign the award letter and return it to the Financial Aid Office.

The Financial Aid Officer is available to answer any questions concerning financial aid. For information on how, when and where to receive Financial Aid, please contact the Financial Aid Office.

Veterans Educational Assistance Benefits

The Veterans Affairs Office is located in the Student Services Division. Anyone eligible for V.A. benefits is urged to visit the V.A. office at least one month before entering College.

V.A. benefits recipients must complete the following steps in order to benefit from the G.I. Bill:

1. Complete and submit an admissions application along with official copies of ALL high school transcripts/GED scores, post-secondary, and military transcripts.
2. Bring an original or registered copy of the DD-214 (discharge papers) and come by the V.A. Office for an interview. During this time V.A. paperwork will be completed, and the veteran will be asked to submit any necessary supportive data (birth certificates of children, marriage licenses, etc.).
3. Register for first quarter's classes.

Veteran students are expected to attend classes regularly. Veterans are also responsible for notifying the V.A. Office in the event of withdrawal from a class or from College. Failure to do so will create overpayments for which the veteran will probably be liable.



Programs



ACCOUNTING
T-016

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

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

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

COURSE AND HOUR REQUIREMENTS		HOURS		
	Title	**Class**	**Lab**	**Credit**
MAJOR COURSES:				
BUS 120	Accounting I	4	3	5
BUS 121	Accounting II	4	3	5
BUS 122	Accounting III	4	3	5
BUS 133	Governmental Accounting	3	2	4
BUS 222	Intermediate Accounting I	3	2	4
BUS 225	Cost Accounting	3	2	4
BUS 223	Intermediate Accounting II	3	2	4
BUS 229	Income Taxes I	3	2	4
BUS 127	Financial Management	3	2	4
BUS 221	Payroll Accounting	2	2	3
BUS 226	Introduction to Auditing	3	0	3
BUS 231	Income Taxes II	3	2	4
BUS 259	Managerial Planning	2	0	2
BUS 248	Business Economics I	5	0	5
BUS 110	Office Machines	1	2	2
		46	27	58
RELATED COURSES:				
BUS 101	Introduction to Business	5	0	5
BUS 131	Business Communications	3	2	4
BUS 237	Small Business Management	3	2	4
BUS 102	Typing I	2	3	3
BUS 115	Business Law	5	0	5
MAT 110	Business Math	5	0	5
EDP 104	Introduction to Data Processing	3	2	4
ORI 101	College Orientation	1	0	1
EDP 205	Computerized Accounting	2	3	3
		29	12	34
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 109	Human Relations	3	0	3
ENG 103	Report Writing	3	0	3
***	*** Social Science Elective	3	0	3
		22	0	22
WORK EXPERIENCE:		0	0	0
ELECTIVES:		5	0	5
TOTAL CREDITS				119
RECOMMENDED ELECTIVES:				
BUS 202	Word Processing Systems I	1	4	3
BUS 272	Principles of Supervision	5	0	5
BUS 239	Marketing	5	0	5

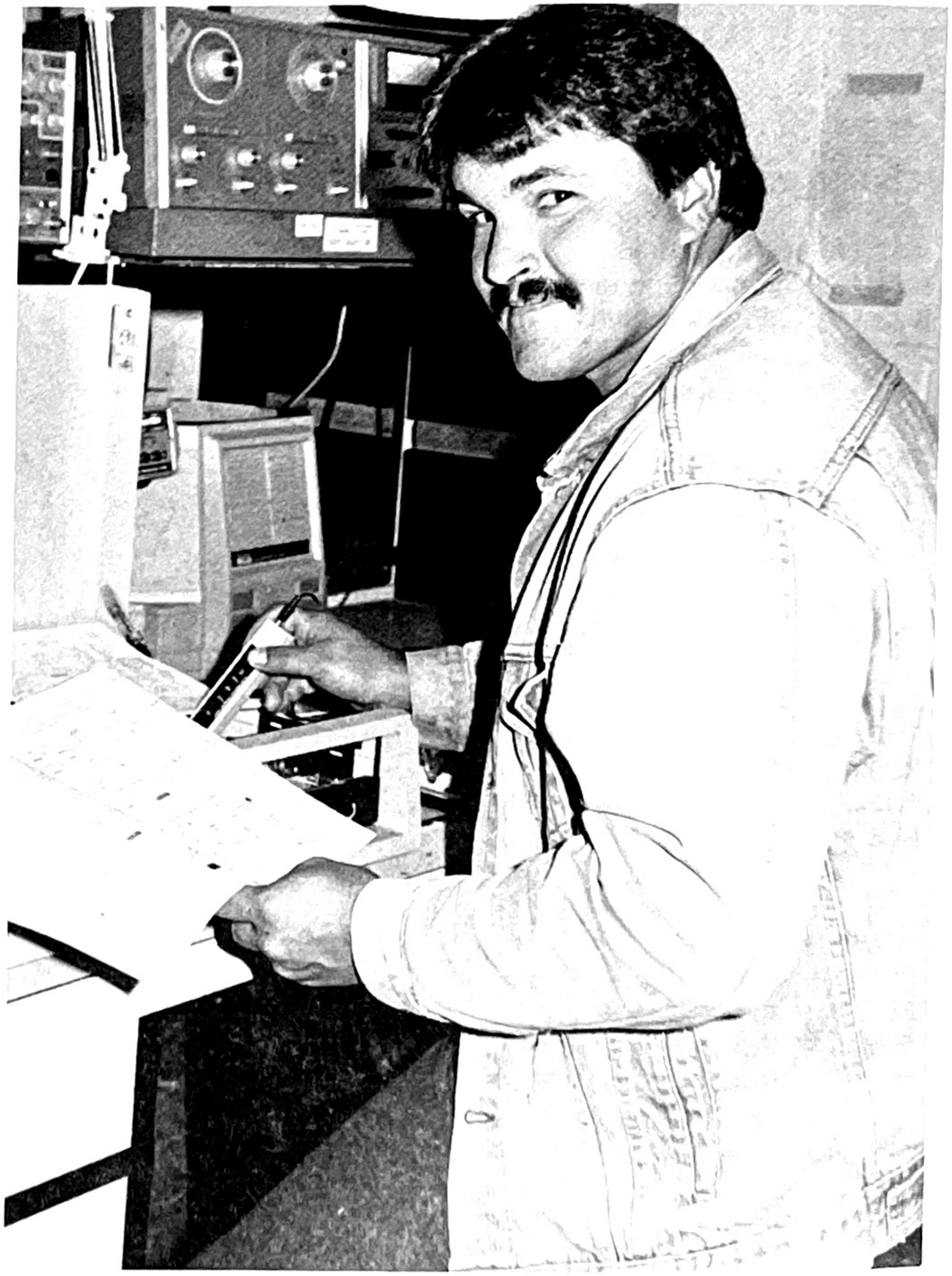
AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	Lab	Credit
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
MAT 110	Business Math	5	0	5
BUS 101	Introduction to Business	5	0	5
BUS 110	Office Machines	1	2	2
ORI 101	College Orientation	1	0	1
		17	2	18
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
BUS 120	Accounting I	4	3	5
BUS 248	Business Economics I	5	0	5
EDP 104	Introduction to Data Processing	3	2	4
		17	5	19
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 121	Accounting II	4	3	5
BUS 237	Small Business Management	3	2	4
BUS 102	Typing I	2	3	3
		12	8	15
FOURTH QUARTER				
BUS 221	Payroll Accounting	2	2	3
BUS 122	Accounting III	4	3	5
BUS 133	Governmental Accounting	3	2	4
***	*** Elective (Social Science)	3	0	3
		12	7	15
FIFTH QUARTER				
BUS 131	Business Communications	3	2	4
BUS 115	Business Law I	5	0	5
BUS 222	Intermediate Accounting I	3	2	4
BUS 225	Cost Accounting	3	2	4
		14	6	17
SIXTH QUARTER				
PSY 109	Human Relations	3	0	3
BUS 223	Intermediate Accounting II	3	2	4
BUS 229	Income Taxes I	3	2	4
BUS 127	Financial Management	3	2	4
ENG 103	Report Writing	3	0	3
		15	6	18
SEVENTH QUARTER				
BUS 226	Introduction to Auditing	3	0	3
BUS 231	Income Taxes II	3	2	4
EDP 205	Computerized Accounting	2	3	3
BUS 259	Managerial Planning	2	0	2
***	*** Elective	5	0	5
		15	5	17

ALTERNATE ENERGY TECHNOLOGY
T-178

The Alternate Energy Technology curriculum prepares the student to design, sell, install, maintain, test and repair systems which use solar-derived energy for residential and commercial use. The solar applications emphasized include swimming pool heaters, domestic hot water and passive and active heating and cooling. Electrical conversion systems from solar, wind, and water energy sources are also covered. The student is introduced to manual skills in carpentry, masonry, plumbing and electricity and to technical skills in drafting, laboratory measurement, troubleshooting, and problem-solving. The student is also exposed to politics and the economics affecting alternate energy businesses today. In addition, the student acquires a firm foundation in language arts, computational skills, and the principles of physics. The curriculum moves from a development of basic skills and description of system components in the first year to the practice of design techniques and problem-solving procedures in the second year. The goal of the curriculum is to provide the student with the basic skills required to adapt to the changing environment of the alternate energy industry.



COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
EGY 101	Introduction to Alternate Energy Systems	2	0	2
EGY 102	Solar Radiation	2	0	2
EGY 103	Principles of Solar Collectors	3	6	5
EGY 104	Solar Hot Water Systems	4	6	6
EGY 105	Space Heat Demand	2	0	2
AHR 101	Non-Solar Heating Systems	5	4	7
EGY 106	Passive Design	5	0	5
EGY 107	Solar Space Conditioning	4	6	6
EGY 210	Energy Project Lab I	2	4	4
EGY 108	Experimental Design	1	2	2
EGY 205	Photovoltaic Systems	3	2	4
AHR 201	Instrumentation and Controls	3	6	5
ECO 201	Cost Benefit Analysis of Alternate Energy Systems	2	0	2
EGY 203	Design of Alternate Energy Systems	2	2	3
EGY 208	Wind and Hydro Systems	2	0	2
EGY 201	Installation and Maintenance of Solar Energy Systems	3	6	5
EGY 206	Energy Management and Planning	2	0	2
EGY 211	Energy Project Lab II	2	6	4
EGY 209	Advanced Control Systems	2	2	3
		51	52	71
RELATED COURSES:				
MAT 105	Introduction to Algebra	5	0	5
MAT 111	Applied Trigonometry	5	0	5
POL 104	Political Perspectives on Energy Use	2	0	2
PHY 101	Physics: Mechanics	3	2	4
ELC 109	Fundamentals of AC and DC	3	2	4
DFT 101	Technical Drafting I	0	6	2
PHY 102	Physics: Heat, Sound and Light	3	2	4
DFT 102	Technical Drafting II	0	6	2
ORI 101	College Orientation	1	0	1
BUS 237	Small Business Management	3	2	4
		25	20	33
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 103	Report Writing	3	0	3
ENG 204	Oral Communications	3	0	3
	Elective in Social Science	3	0	3
		19	0	19
WORK EXPERIENCE:				0
ELECTIVES:				0
TOTAL CREDITS:				123
AWARD:		Associate of Applied Science Degree		

AUTOMOTIVE MECHANICS
V-003

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

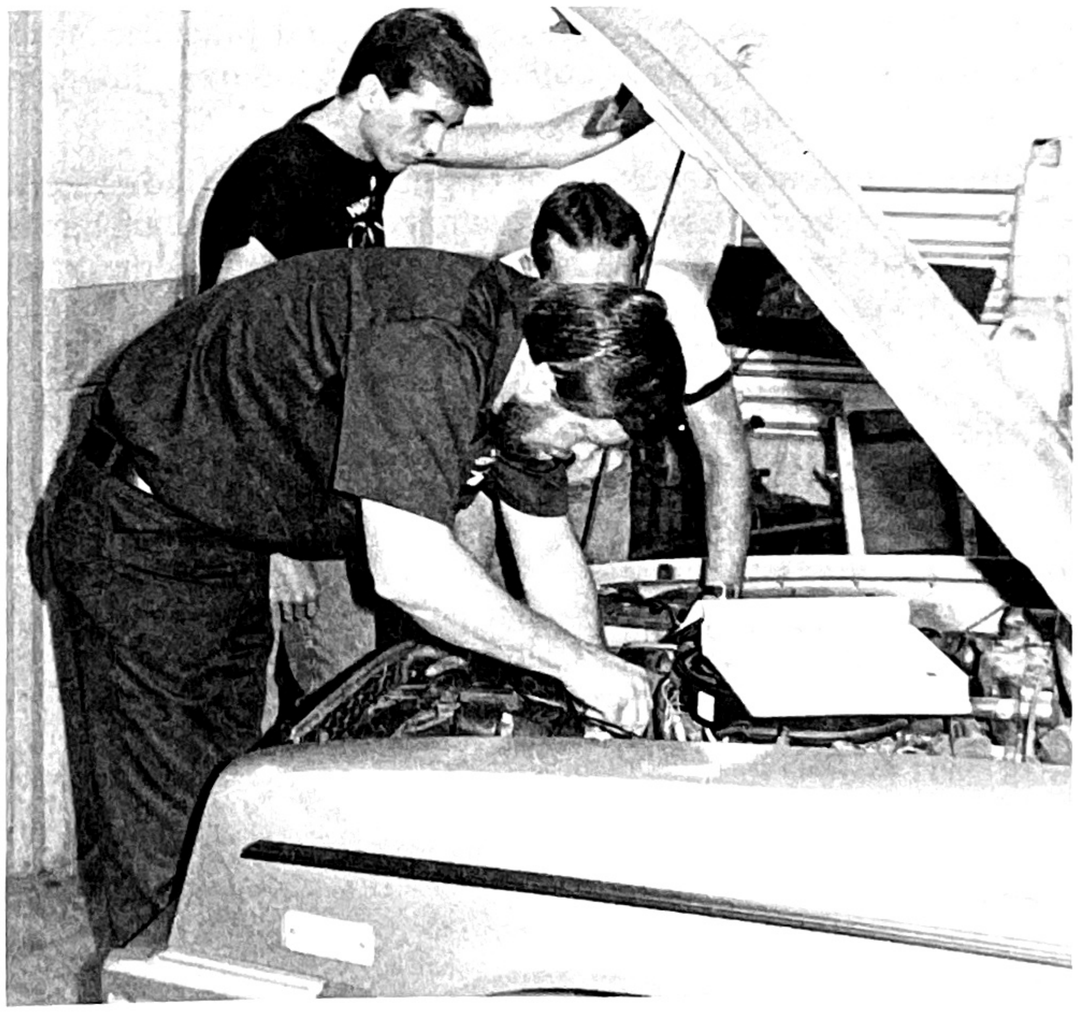
Automobile mechanics maintain and repair mechanical, electrical and body parts of passenger cars, trucks and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation.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

COURSE AND HOUR REQUIREMENTS

Title			Class	Lab	Shop	Credit
MAJOR COURSES:						
AUT 1116	Automotive Engines		8	0	15	13
AUT 1128	Fuel Systems		5	0	15	10
OR						
AUT	1524	Fuel Mechanisms	3	0	15	8
AUT	1525	Electronic Fuel Injection	1	0	0	1
AUT	1526	Port Fuel Injection	1	0	0	1
AUT 1129	Electrical and Electronic Systems		7	0	15	12
OR						
AUT	1529	Electrical and Electronic Systems I	3	0	3	4
AUT	1530	Electrical and Electronic Systems II	4	0	12	8
AUT 1208	Emission Controls		2	0	3	3
AUT 1126	Engine Diagnosis & Tune-up		5	0	9	8
AUT 1123	Chassis and Suspension Systems		5	0	9	8
AUT 1121	Braking Systems		3	0	6	5
AUT 1124	Manual Transmissions & Power Trains		5	0	18	11
AUT 1127	Automatic Transmissions		5	0	15	10
***	***	Technical Elective	3	0	0	3
			48	0	105	83
RELATED COURSES:						
MAT 1101	Fundamentals of Math		5	0	0	5
PHY 1101	Applied Science I		3	2	0	4
ORI 101	College Orientation		1	0	0	1
WLD 1101	Basic Welding		1	0	3	2
BUS 237	Small Business Management		3	2	0	4
AHR 1101	Air Conditioning Systems		2	0	6	4
			15	4	9	20
GENERAL EDUCATION:						
ENG 1106	Fundamentals of English		3	0	0	3
PSY 109	Human Relations		3	0	0	3
			6	0	0	6
WORK EXPERIENCE:						0
TECHNICAL ELECTIVES:						
AUT 1119	Cooling and Lubrication Systems		2	0	3	3
AUT 1507	Computer Controls		1	0	0	1
AUT 1508	Advanced Computer Controls		1	0	0	1
TOTAL CREDITS:						109
AWARD:						Advanced Diploma

CURRICULUM BY QUARTERS

		HOURS			
		Class	Lab	Shop	Credit
FIRST QUARTER					
AUT 1116	Automotive Engines	8	0	15	13
MAT 1101	Fundamentals of Math	5	0	0	5
ORI 101	College Orientation	1	0	0	1
		14	0	15	19
SECOND QUARTER					
AUT 1128	Fuel Systems	5	0	15	10
OR					
AUT 1524	Fuel Mechanisms	3	0	15	8
AUT 1525	Electronic Fuel Injection	1	0	0	1
AUT 1526	Port Fuel Injection	1	0	0	1
PHY 1101	Applied Science I	3	2	0	4
		8	2	15	14
THIRD QUARTER					
AUT 1129	Electrical and Electronic Systems	7	0	15	12
OR					
AUT 1529	Electrical and Electronic Systems I	3	0	3	4
AUT 1530	Electrical and Electronic Systems II	4	0	12	8
ENG 1106	Fundamentals of English	3	0	0	3
		10	0	15	15
FOURTH QUARTER					
AUT 1208	Emission Controls	2	0	3	3
AUT 1126	Engine Diagnosis & Tune-up	5	0	9	8
AHR 1101	Air Conditioning Systems	2	0	6	4
		9	0	18	15
FIFTH QUARTER					
AUT 1123	Chassis and Suspension Systems	5	0	9	8
AUT 1121	Braking Systems	3	0	6	5
		8	0	15	13
SIXTH QUARTER					
AUT 1124	Manual Transmissions & Power Trains	5	0	18	11
WLD 1101	Basic Welding	1	0	3	2
PSY 109	Human Relations	3	0	0	3
		9	0	21	16
SEVENTH QUARTER					
AUT 1127	Automatic Transmissions	5	0	15	10
*** ***	Technical Elective	3	0	0	3
BUS 237	Small Business Management	3	2	0	4
		11	2	15	17



BANKING AND FINANCE
T-112

The purposes 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 employees 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 operations, lending and collections procedures, financial analysis, 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 banks, government lending agencies, mortgage banks and credit companies.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
BUS 125	Principles of Bank Operations	3	0	3
BUS 142	Installment Credit	3	0	3
BUS 144	Financial Principles	3	0	3
BUS 143	Savings and Time Deposit	3	0	3
BUS 280	Federal Reserve System	3	0	3
BUS 284	Bank Management	3	0	3
BUS 256	Introduction to Commercial Lending	3	0	3
BUS 281	Bank Investments	3	0	3
BUS 287	Financing Business Enterprise	3	0	3
BUS 230	Analyzing Financial Statements	3	0	3
BUS 101	Introduction to Business	5	0	5
BUS 120	Accounting I	4	3	5
BUS 121	Accounting II	4	3	5
BUS 110	Office Machines	1	2	2
BUS 286	Bank Cards	3	0	3
BUS 288	Home Mortgage Lending	3	0	3
BUS 259	Managerial Planning	2	0	2
***	*** Technical Elective	3	0	3
		55	8	58
RELATED COURSES:				
BUS 131	Business Communications	3	2	4
BUS 239	Marketing	5	0	5
BUS 248	Business Economics I	5	0	5
BUS 249	Business Economics II	5	0	5
MAT 110	Business Math	5	0	5
ORI 101	College Orientation	1	0	1
BUS 272	Principles of Supervision	5	0	5
BUS 115	Business Law	5	0	5
EDP 104	Introduction to Data Processing	3	2	4
		37	4	39
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
ENG 103	Report Writing	3	0	3
PSY 109	Human Relations	3	0	3
SOC 102	Principles of Sociology	5	0	5
		24	0	24
WORK EXPERIENCE:				0
TECHNICAL ELECTIVES:				
BUS 283	International Banking	3	0	3
BUS 293	Credit Administration	3	0	3
BUS 294	Branch Management	3	0	3
BUS 277	Credit and Collection	3	2	4
BUS 278	Money and Banking	3	2	4
TOTAL CREDITS:				121

AWARD: Associate of Applied Science Degree

BASIC LAW ENFORCEMENT TRAINING
T-189

The Basic Law Enforcement Training curriculum certificate program prepares individuals to take the Basic Training Law Enforcement Officers certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or it prepares individuals to take the Justice Officers Basic Training certification examination mandated by the North Carolina Sheriffs' Education and Training Standards Commission. Successful completion of this curriculum certificate program requires that the student satisfy the minimum requirements for certification by the Criminal Justice Commission and/or the Sheriffs' Commission. The student satisfactorily completing this program should possess at least the minimum degree of general attributes, knowledge, and skills to function as an inexperienced law enforcement officer.

Job opportunities are available with state, county, and municipal governments in North Carolina. In addition, knowledge, skills, and abilities acquired in this course of study qualify one for job opportunities with private enterprise in such areas as industrial, retail, and private security.

COURSE AND HOUR REQUIREMENTS

Title	HOURS Class	Lab	Credit
MAJOR COURSES:			
PSC 105 N.C. Basic Law Enforcement	16	24	24
RELATED COURSES:	0	0	0
GENERAL EDUCATION:	0	0	0
WORK EXPERIENCE:	0	0	0
ELECTIVES:	0	0	0
TOTAL CREDITS:			24
AWARD			Certificate

BUSINESS ADMINISTRATION
T-018

The Business Administration curriculum is designed to prepare an individual for entry into middle-management occupations in various businesses and industries. The curriculum provides an overview of the business and industrial world, its organization and management.

The purpose of the curriculum will be fulfilled through courses designed to develop competency in understanding the principles of organization and management in business operations, utilizing modern techniques to make decisions, understanding the economy through study and analysis of the role of production and marketing, communicating orally and in writing, and interpersonal relationships.

Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in middle-management activities in business or industry.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Credit
MAJOR COURSES:				
BUS 101	Introduction to Business	5	0	5
BUS 248	Business Economics I	5	0	5
BUS 237	Small Business Management	3	2	4
BUS 272	Principles of Supervision	5	0	5
BUS 244	Retail Management	5	0	5
BUS 232	Sales Development	3	2	4
BUS 127	Financial Management	3	2	4
BUS 233	Current Trends in Business Management	3	2	4
BUS 239	Marketing	5	0	5
BUS 259	Managerial Planning	2	0	2
BUS 131	Business Communications	3	2	4
BUS 115	Business Law	5	0	5
BUS 110	Office Machines	1	2	2
***	*** Technical Elective	3	0	3
		51	12	57
RELATED COURSES:				
MAT 110	Business Math	5	0	5
ORI 101	College Orientation	1	0	1
BUS 102	Typing I	2	3	3
BUS 120	Accounting I	4	3	5
EDP 104	Introduction to Data Processing	3	2	4
BUS 121	Accounting II	4	3	5
BUS 229	Income Taxes I	3	2	4
BUS 231	Income Taxes II	3	2	4
BUS 122	Accounting III	4	3	5
BUS 221	Payroll Accounting	2	2	3
***	*** Related Elective	3	0	3
		34	20	42
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 103	Report Writing	3	0	3
ENG 204	Oral Communications	3	0	3
PSY 109	Human Relations	3	0	3
		19	0	19
WORK EXPERIENCE:				0
TECHNICAL ELECTIVES:				
BUS 285	Real Estate Market Valuation	3	0	3
BUS 289	Real Estate Law	4	0	4
BUS 290	Real Estate Finance	3	0	3
BUS 291	Fundamentals of Real Estate	6	0	6
BUS 292	Real Estate Brokerage Operations	3	0	3
BUS 263	Statistical Quality Control	3	2	4

BUS 265	Work Measurement	3	2	4
BUS 266	Value Analysis	3	2	4
BUS 267	Production Control	3	2	4
BUS 268	Plant Layout	3	2	4
BUS 270	Industrial Management	5	0	5
BUS 273	Personnel Management	5	0	5
RELATED ELECTIVE (Recommended)				
COE 101	Cooperative Work Experience	0	10	1
COE 102	Cooperative Work Experience	2	20	2
TOTAL CREDITS:				118

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
MAT 110	Business Math	5	0	5
BUS 101	Introduction to Business	5	0	5
BUS 110	Office Machines	1	2	2
BUS 102	Typing I	2	3	3
ORI 101	College Orientation	1	0	1
		19	5	21
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
BUS 120	Accounting I	4	3	5
BUS 248	Business Economics I	5	0	5
		14	3	15
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 121	Accounting II	4	3	5
BUS 237	Small Business Management	3	2	4
***	*** Technical Elective	3	0	3
		13	5	15
FOURTH QUARTER				
BUS 272	Principles of Supervision	5	0	5
BUS 122	Accounting III	4	3	5
BUS 221	Payroll Accounting	2	2	3
***	*** Related Elective	3	0	3
		14	5	16
FIFTH QUARTER				
BUS 131	Business Communications	3	2	4
BUS 115	Business Law	5	0	5
BUS 232	Sales Development	3	2	4
EDP 104	Introduction to Data Processing	3	2	4
		14	6	17
SIXTH QUARTER				
PSY 109	Human Relations	3	0	3
BUS 127	Financial Management	3	2	4
BUS 229	Income Taxes I	3	2	4
BUS 244	Retail Management	5	0	5
ENG 103	Report Writing	3	0	3
		17	4	19
SEVENTH QUARTER				
BUS 233	Current Trends in Business Management	3	2	4
BUS 231	Income Taxes II	3	2	4
BUS 239	Marketing	5	0	5
BUS 259	Managerial Planning	2	0	2
		13	4	15

BUSINESS COMPUTER PROGRAMMING
T-022

The primary objective of the Business Computer Programming curriculum is to prepare individuals for gainful employment as computer programmers. The objective is fulfilled through study and application in areas such as computer and systems theories and concepts, data processing techniques, business operations, logic, flow charting, programming procedures and languages and types, uses and operation of equipment.

Entry-level jobs as computer programmer and computer programmer trainee are available. With experience and additional education, the individual may enter jobs such as data processing manager, computer programmer manager, systems analyst and systems manager.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
EDP 104	Introduction to Data Processing	3	2	4
EDP 108	Introduction to Programming	4	3	5
EDP 211	PASCAL	4	3	5
EDP 214	COBOL Programming I	4	3	5
EDP 219	System Analysis and Design	5	0	5
EDP 204	Computer Graphics Design	3	3	4
EDP 206	Operating Systems	3	2	4
EDP 208	RPG II	3	3	4
EDP 215	COBOL Programming II	4	3	5
EDP 216	Integrated Applications Development I	3	3	4
EDP 218	Database Programming	3	0	3
EDP 220	Structured Testing and Documentation	3	3	4
EDP 202	Assembly Language and Programming	4	3	5
EDP 221	Integrated Applications Development II	3	3	4
EDP 112	Microcomputer Word Processing and Office Automation	1	2	2
EDP 212	Trends and Issues in Data Processing	3	0	3
***	*** Technical Elective	3	0	3
		56	36	69
RELATED COURSES:				
MAT 105	Introduction to Algebra	5	0	5
BUS 120	Accounting I	4	3	5
MAT 119	Mathematics of Computer Systems	3	0	3
BUS 121	Accounting II	4	3	5
BUS 202	Word Processing Systems I	1	4	3
MAT 108	College Algebra	5	0	5
ORI 101	College Orientation	1	0	1
***	*** Related Elective	3	0	3
		26	10	30
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
ENG 103	Report Writing	3	0	3
***	*** General Education Elective	3	0	3
		19	0	19
WORK EXPERIENCE:		0	0	0
TECHNICAL ELECTIVES:				
EDP 105	Special Topics in Computer Operations	1	2	2
EDP 107	Data Management in Small Business	3	2	4
EDP 110	BASIC Programming II	2	4	4
EDP 201	Individual Programming Project	1	2	2
EDP 200	Operations Lab	0	5	2
EDP 210	FORTRAN Programming	2	4	4
EDP 205	Computerized Accounting	2	3	3
EDP 217	Supervised Work Experience	0	20	2

RELATED ELECTIVES:

BUS 113	Keyboarding	1	2	2
BUS 237	Small Business Management	3	2	4

TOTAL CREDITS: 118

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
EDP 104	Introduction to Data Processing	3	2	4
EDP 108	Introduction to Programming	4	3	5
ENG 101	Language and Composition I	5	0	5
MAT 105	Introduction to Algebra	5	0	5
ORI 101	College Orientation	1	0	1
		18	5	20
SECOND QUARTER				
BUS 120	Accounting I	4	3	5
EDP 211	PASCAL	4	3	5
ENG 102	Language and Composition II	5	0	5
MAT 119	Mathematics of Computer Systems	3	0	3
		16	6	18
THIRD QUARTER				
BUS 121	Accounting II	4	3	5
EDP 214	COBOL Programming I	4	3	5
EDP 219	System Analysis and Design	5	0	5
ENG 204	Oral Communications	3	0	3
		16	6	18
FOURTH QUARTER				
BUS 202	Word Processing Systems I	1	4	3
EDP 204	Computer Graphics Design	3	3	4
EDP 112	Microcomputer Word Processing and Office Automation	1	2	2
ENG 103	Report Writing	3	0	3
***	*** Technical Elective	3	0	3
		11	9	15
FIFTH QUARTER				
EDP 206	Operating Systems	3	2	4
EDP 208	RPG II	3	3	4
EDP 215	COBOL Programming II	4	3	5
***	*** General Education Elective	3	0	3
		13	8	16
SIXTH QUARTER				
EDP 216	Integrated Applications Development I	3	3	4
EDP 218	Database Programming	3	0	3
EDP 220	Structured Testing and Documentation	3	3	4
MAT 108	College Algebra	5	0	5
		14	6	16
SEVENTH QUARTER				
EDP 202	Assembly Language and Programming	4	3	5
EDP 221	Integrated Applications Development II	3	3	4
EDP 212	Trends and Issues in Data Processing	3	0	3
***	*** Related Elective	3	0	3
		13	6	15

CARPENTRY AND CABINETMAKING
V-007

Carpenters construct, erect, install and repair structures of wood, plywood and wallboard, using hand and power tools. This curriculum in carpentry is designed to prepare individuals with skills and knowledge of construction with wood. The curriculum includes mathematics, blueprint reading, methods of construction and information on building materials and energy efficient construction.

Carpenters work on new construction and maintain and repair many types of existing structures, both residential and commercial. They have an understanding of building materials, concrete form construction, rough framing, roof and stair construction, the application of interior and exterior trim, insulation, and other energy saving materials and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job may be designated according to the specialty as rough carpenter, framing carpenter, form carpenter, scaffolding carpenter, acoustical insulating carpenter and finish carpenter.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
CAR 1012	Computers in Construction	1	0	3	2
CAR 1101	Principles of Carpentry	5	0	15	10
CAR 1103	Carpentry: Framing	5	0	15	10
CAR 1104	Carpentry: Finishing	5	0	15	10
CAR 1106	Millwork and Cabinetmaking	5	0	15	10
		21	0	63	42
RELATED COURSES:					
BUS 237	Small Business Management	3	2	0	4
ORI 101	College Orientation	1	0	0	1
DFT 1110	Blueprint Reading: Building Trades	1	0	3	2
MAT 1112	Mathematics: Building Trades	2	0	0	2
ELC 1110	Basic Electricity	1	0	3	2
DFT 1131	Drafting: Building Trades	1	0	3	2
DFT 1135	Design Techniquies (CAD)	3	2	0	4
MAT 1109	Estimating: Building Trades	4	0	0	4
CIV 1120	Building Trades Instruments	1	0	3	2
		17	4	12	23
GENERAL EDUCATION:					
ENG 1111	Reading Comprehension	2	0	0	2
ENG 1112	Communication Skills	2	0	0	2
PSY 109	Human Relations	3	0	0	3
		7	0	0	7
WORK EXPERIENCE:					0
TOTAL CREDITS:					72
AWARD:					Diploma

CURRICULUM BY QUARTERS

		HOURS Class	Lab	Shop	Credit
FIRST QUARTER					
CAR 1101	Principles of Carpentry	5	0	15	10
DFT 1110	Blueprint Reading: Building Trades	1	0	3	2
ELC 1110	Basic Electricity	1	0	3	2
MAT 1112	Mathematics: Building Trades	2	0	0	2
ORI 101	College Orientation	1	0	0	1
		10	0	21	17

SECOND QUARTER

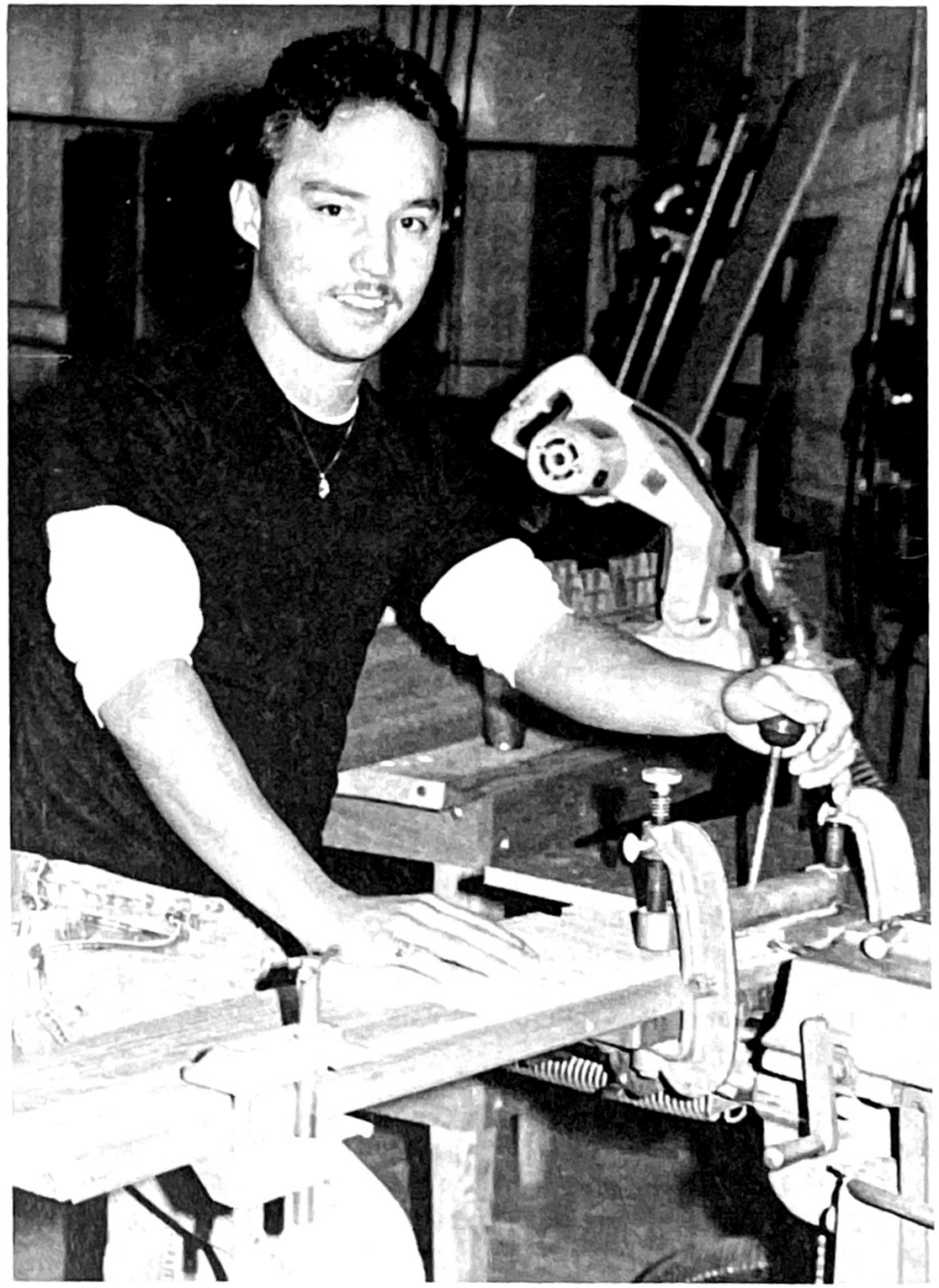
CAR 1103	Carpentry: Framing	5	0	15	10
DFT 1131	Drafting: Building Trades	1	0	3	2
ENG 1111	Reading Comprehension	2	0	0	2
BUS 237	Small Business Management	3	2	0	4
		11	2	18	18

THIRD QUARTER

CAR 1104	Carpentry: Finishing	5	0	15	10
DFT 1135	Design Techniques (CAD)	3	2	0	4
ENG 1112	Communication Skills	2	0	0	2
MAT 1109	Estimating: Building Trades	4	0	0	4
		14	2	15	20

FOURTH QUARTER

CAR 1106	Millwork and Cabinetmaking	5	0	15	10
CIV 1120	Building Trades Instruments	1	0	3	2
PSY 109	Human Relations	3	0	0	3
CAR 1012	Computers in Construction	1	0	3	2
		10	0	21	17



COMMERCIAL ART AND ADVERTISING DESIGN
T-070

Students in the Commercial Art and Advertising Design curriculum study advertising, illustration, layout, typography, design, photography, graphic communications and production.

Commercial artists and advertising designers create and design layouts and art work for print and audiovisual media. They may design and prepare letterheads, brochures, illustrations, and art for publication; produce package design; and prepare lettering, type, and art for print and audiovisual media.

Job opportunities for graduates of this program may be in art and design studios, advertising agencies, department stores, industrial advertising departments, government agencies, television and film studios, and the printing and publishing industry.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
ART 100	Art Orientation	1	0	1
CAT 101	Advertising Principles	3	0	3
CAT 102	Art and Design	2	6	4
CAT 121	Commercial Art Fundamentals	4	6	6
CAT 105	Basic Drawing	2	3	3
CAT 122	Typographic Design	4	6	6
CAT 106	Life Study	0	6	2
CAT 116	Photography	2	6	4
CAT 123	Layout and Design	4	6	6
CAT 236	Advertising Concepts and Campaigns	3	3	4
CAT 117	Photography II	2	3	3
CAT 201	Art History	3	0	3
CAT 212	Industrial Art and Design	2	6	4
CAT 110	General Illustration	2	6	4
CAT 224	Art Production	4	6	6
CAT 206	Project Seminar I	2	3	3
CAT 225	Commercial Art and Advertising Design	4	6	6
CAT 231	Project Seminar II	2	3	3
CAT 217	Silk Screen Techniques	1	6	3
CAT 226	Commercial Art and Advertising Design (Advanced)	4	6	6
CAT 232	Project Seminar III	1	6	3
CAT 234	Portfolio and Resume Development	5	0	5
		57	93	88
RELATED COURSES:				
DFT 101	Technical Drafting I	0	6	2
DFT 102	Technical Drafting II	0	6	2
EDP 115	Computer Graphics	3	2	4
MAT 135	Copyfitting Math	3	0	3
BUS 102	Typing I	2	3	3
BUS 232	Sales Development	3	2	4
ORI 101	College Orientation	1	0	1
		12	19	19
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 103	General Psychology	5	0	5
		18	0	18
WORK EXPERIENCE:				0
ELECTIVES:				0
TOTAL CREDITS:				125
AWARD:				Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
ART 100	Art Orientation	1	0	1
DFT 101	Technical Drafting I	0	6	2
CAT 101	Advertising Principles	3	0	3
CAT 102	Art and Design	2	6	4
CAT 121	Commercial Art Fundamentals	4	6	6
ORI 101	College Orientation	1	0	1
		16	18	22
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
DFT 102	Technical Drafting II	0	6	2
CAT 105	Basic Drawing	2	3	3
CAT 122	Typographic Design	4	6	6
		11	15	16
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
CAT 106	Life Study	0	6	2
CAT 116	Photography	2	6	4
CAT 123	Layout and Design	4	6	6
EDP 115	Computer Graphics	3	2	4
		12	20	19
FOURTH QUARTER				
CAT 236	Advertising Concepts and Campaigns	3	3	4
CAT 117	Photography II	2	3	3
MAT 135	Copyfitting Math	3	0	3
CAT 201	Art History	3	0	3
CAT 212	Industrial Art and Design	2	6	4
		13	12	17
FIFTH QUARTER				
BUS 232	Sales Development	3	2	4
CAT 110	General Illustration	2	6	4
CAT 224	Art Production	4	6	6
CAT 206	Project Seminar I	2	3	3
		11	17	17
SIXTH QUARTER				
BUS 102	Typing I	2	3	3
CAT 225	Commercial Art and Advertising Design	4	6	6
CAT 217	Silk Screen Techniques	1	6	3
CAT 231	Project Seminar II	2	3	3
		9	18	15
SEVENTH QUARTER				
PSY 103	General Psychology	5	0	5
CAT 226	Commercial Art and Advertising Design (Adv.)	4	6	6
CAT 232	Project Seminar III	1	6	3
CAT 234	Portfolio and Resume Development	5	0	5
		15	12	19

COMPUTER ENGINEERING TECHNOLOGY
T-040

This program is intended to provide the skills required to install, service and maintain computers, microprocessor and computer controlled equipment and computer peripheral devices.

The curriculum provides training in both the hardware and software areas of the computer field.

A sequence of introductory hardware courses provides the student with a strong background in physics, technical mathematics, electricity, electronics, and digital logic circuits and concepts. Advanced course work provides a detailed study of: the logic of the central processing unit, the operation of integrated circuits in the central processing unit, the operation and use of integrated circuit memory devices and the interfacing of the central processing unit to memory devices. Additional studies cover interfacing the central processing unit to external devices using both serial and parallel data tansfer, the operation of large scale integration programmable interface units and their interfacing with the central processing unit, and the operation of computer peripheral devices such as video displays, printers, floppy disk storage systems, magnetic tape units, keyboards and the techniques of converting signal between and analog and digital forms.

The programming course work provides a sequence of study stressing good program design techniques, structured programming and program documentation. Rather than being familiar with a large number of programming languages, the student is expected to learn well a highly structured language, such as Pascal, and an assembly language. The importance of assembly language to the understanding of the operation of the central processing unit and the related computer units is stressed. Computer operating system concepts are discussed to provide a unified view of the hardware and software aspects of the computer system.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
ELN 102	Introduction to Electronics	5	4	0	7
ELN 104	Circuit Analysis	5	4	0	7
ELN 106	Solid State Devices	5	4	0	7
ELN 110	Basic Troubleshooting	3	2	0	4
ELN 201	Electronic Circuits	5	4	0	7
ELN 109	Digital Logic Circuits I	3	2	0	4
ELN 224	Electronic Layout and Design	0	0	3	1
ELN 236	Microprocessor Analysis	3	0	3	4
ELN 237	Microprocessor Interfacing	3	0	3	4
ELN 209	Digital Logic Circuits II	3	2	0	4
ELN 235	Instrumentation and Testing	3	0	3	4
ELN 238	Microcontroller Design	3	0	3	4
ELN 239	Digital Communications	3	2	0	4
ELN 202	Linear Circuits	1	4	0	3
ELN 240	Advanced Microprocessor Design	3	0	3	4
ELN 234	Electronic Fabrication	0	0	3	1
ELN 205	Computer Repair	2	4	0	4
		50	32	21	73
RELATED COURSES:					
MAT 115	Electrical Math I	5	0	0	5
DFT 101	Technical Drafting I	0	0	6	2
MAT 116	Electrical Math II	5	0	0	5
MAT 117	Electrical Math III	5	0	0	5
MAT 119	Mathematics of Computer Systems	3	0	0	3
PHY 102	Physics: Heat, Sound and Light	3	2	0	4
PHY 103	Physics: Electricity and Magnetism	3	2	0	4
MEC 160	Introduction to Robotics	1	0	6	3
ORI 101	College Orientation	1	0	0	1
*** ***	Related Elective	2	2	0	3
		28	6	12	35

GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
	Social Science (elective)	5	0	0	5
		18	0	0	18
WORK EXPERIENCE:					0
RELATED ELECTIVES:					
EDP 106	BASIC Programming	2	2	0	3
EDP 210	FORTRAN Programming	2	4	0	4
EDP 214	COBOL Programming I	4	3	0	5
ELN 112	Electronics Practicum	0	0	10	1
TOTAL CREDITS:					126

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
ENG 101	Language and Composition I	5	0	0	5
MAT 115	Electrical Math I	5	0	0	5
ELN 102	Introduction to Electronics	5	4	0	7
DFT 101	Technical Drafting I	0	0	6	2
ORI 101	College Orientation	1	0	0	1
		16	4	6	20
SECOND QUARTER					
ENG 102	Language and Composition II	5	0	0	5
MAT 116	Electrical Math II	5	0	0	5
ELN 104	Circuit Analysis	5	4	0	7
		15	4	0	17
THIRD QUARTER					
ENG 204	Oral Communications	3	0	0	3
MAT 117	Electrical Math III	5	0	0	5
ELN 106	Solid State Devices	5	4	0	7
ELN 110	Basic Troubleshooting	3	2	0	4
		16	6	0	19
FOURTH QUARTER					
ELN 201	Electronic Circuits	5	4	0	7
MAT 119	Mathematics of Computer Systems	3	0	0	3
ELN 109	Digital Logic Circuits I	3	2	0	4
		11	6	0	14
FIFTH QUARTER					
PHY 102	Physics: Heat, Sound and Light	3	2	0	4
ELN 224	Electronic Layout and Design	0	0	3	1
ELN 236	Microprocessor Analysis	3	0	3	4
ELN 202	Linear Circuits	1	4	0	3
***	Social Science Elective	5	0	0	5
***	Related Elective	2	2	0	3
		14	8	6	20
SIXTH QUARTER					
ELN 237	Microprocessor Interfacing	3	0	3	4
ELN 209	Digital Logic Circuits II	3	2	0	4
ELN 235	Instrumentation and Testing	3	0	3	4
ELN 240	Advanced Microprocessor Design	3	0	3	4
PHY 103	Physics: Electricity and Magnetism	3	2	0	4
		15	4	9	20
SEVENTH QUARTER					
ELN 238	Microcontroller Design	3	0	3	4
ELN 239	Digital Communications	3	2	0	4
ELN 234	Electronic Fabrication	0	0	3	1
MEC 160	Introduction to Robotics	1	0	6	3
ELN 205	Computer Repair	2	4	0	4
		9	6	12	16

COSMETOLOGY
Day Program
(V-009)

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

Upon completion of this program and successful passing of a comprehensive examination administered by the North Carolina State Board of Cosmetic Arts, a license is given. The cosmetologist is called upon to advise men and women on problems of make-up and care of the hair, skin and hands including the nails. Employment opportunities are available in beauty salons, private clubs, department stores, women's specialty shops, as well as setting up one's own business.

COURSE AND HOUR REQUIREMENTS — HOURS

Title		Class	Lab	Shop	Credit
MAJOR COURSES:					
COS 1001	Scientific Study	5	0	0	5
COS 1011	Clinical Applications	0	0	24	8
COS 1002	Scientific Study	5	0	0	5
COS 1022	Clinical Applications	0	0	24	8
COS 1003	Scientific Study	5	0	0	5
COS 1033	Clinical Applications	0	0	24	8
COS 1004	Scientific Study	5	0	0	5
COS 1044	Clinical Applications	0	0	24	8
	DIPLOMA	20	0	96	52
COS 1055	Clinical Applications	0	0	24	8
COS 1005	Theory Review	5	0	0	5
	ADVANCED DIPLOMA	25	0	120	65
RELATED COURSES:					
MAT 103	Foundation Skills for Algebra	3	0	0	3
ORI 101	College Orientation	1	0	0	1
BUS 237	Small Business Management	3	2	0	4
		7	2	0	8
GENERAL EDUCATION:					
ENG 1106	Fundamentals of English	3	0	0	3
PSY 109	Human Relations	3	0	0	3
		6	0	0	6
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:	DIPLOMA				66
	ADVANCED DIPLOMA				79
AWARD:					Diploma
					Advanced Diploma

CURRICULUM BY QUARTERS

		HOURS			
		Class	Lab	Shop	Credit
FIRST QUARTER					
COS 1001	Scientific Study	5	0	0	5
COS 1011	Clinical Applications	0	0	24	8
ENG 1106	Fundamentals of English	3	0	0	3
ORI 101	College Orientation	1	0	0	1
		9	0	24	17
SECOND QUARTER					
COS 1002	Scientific Study	5	0	0	5
COS 1022	Clinical Applications	0	0	24	8
PSY 109	Human Relations	3	0	0	3
		8	0	24	16

THIRD QUARTER					
COS 1003	Scientific Study	5	0	0	5
COS 1033	Clinical Applications	0	0	24	8
MAT 103	Foundation Skills for Algebra	3	0	0	3
		8	0	24	16
FOURTH QUARTER					
COS 1004	Scientific Study	5	0	0	5
COS 1044	Clinical Applications	0	0	24	8
BUS 237	Small Business Management	3	2	0	4
		8	2	24	17
FIFTH QUARTER (ADVANCED DIPLOMA)					
COS 1055	Clinical Applications	0	0	24	8
COS 1005	Theory Review	5	0	0	5
		5	0	24	13

COSMETOLOGY
Evening Program (V-009)

COURSE AND HOUR REQUIREMENTS

Title		Class	Lab	Shop	Credit
MAJOR COURSES:					
COS 1001	Scientific Study	5	0	0	5
COS 1511	Clinical Applications	0	0	15	5
COS 1002	Scientific Study	5	0	0	5
COS 1512	Clinical Applications	0	0	15	5
COS 1003	Scientific Study	5	0	0	5
COS 1513	Clinical Applications	0	0	15	5
COS 1004	Scientific Study	5	0	0	5
COS 1514	Clinical Applications	0	0	15	5
COS 1515	Clinical Applications	0	0	15	5
COS 1516	Clinical Applications	0	0	15	5
COS 1517	Clinical Applications	0	0	15	5
COS 1518	Clinical Applications	0	0	12	4
		20	0	117	59
RELATED COURSES:					
MAT 103	Foundation Skills for Algebra	3	0	0	3
***	*** Related Elective	3	0	0	3
		6	0	0	6
GENERAL EDUCATION:					
ENG 1106	Fundamentals of English	3	0	0	3
PSY 109	Human Relations	3	0	0	3
		6	0	0	6
RECOMMENDED ELECTIVES:					
BUS 237	Small Business Management	3	2	0	4
EDP 102	Computer Literacy for Beginners	1	2	0	2
NUR 110	First Aid	3	0	0	3

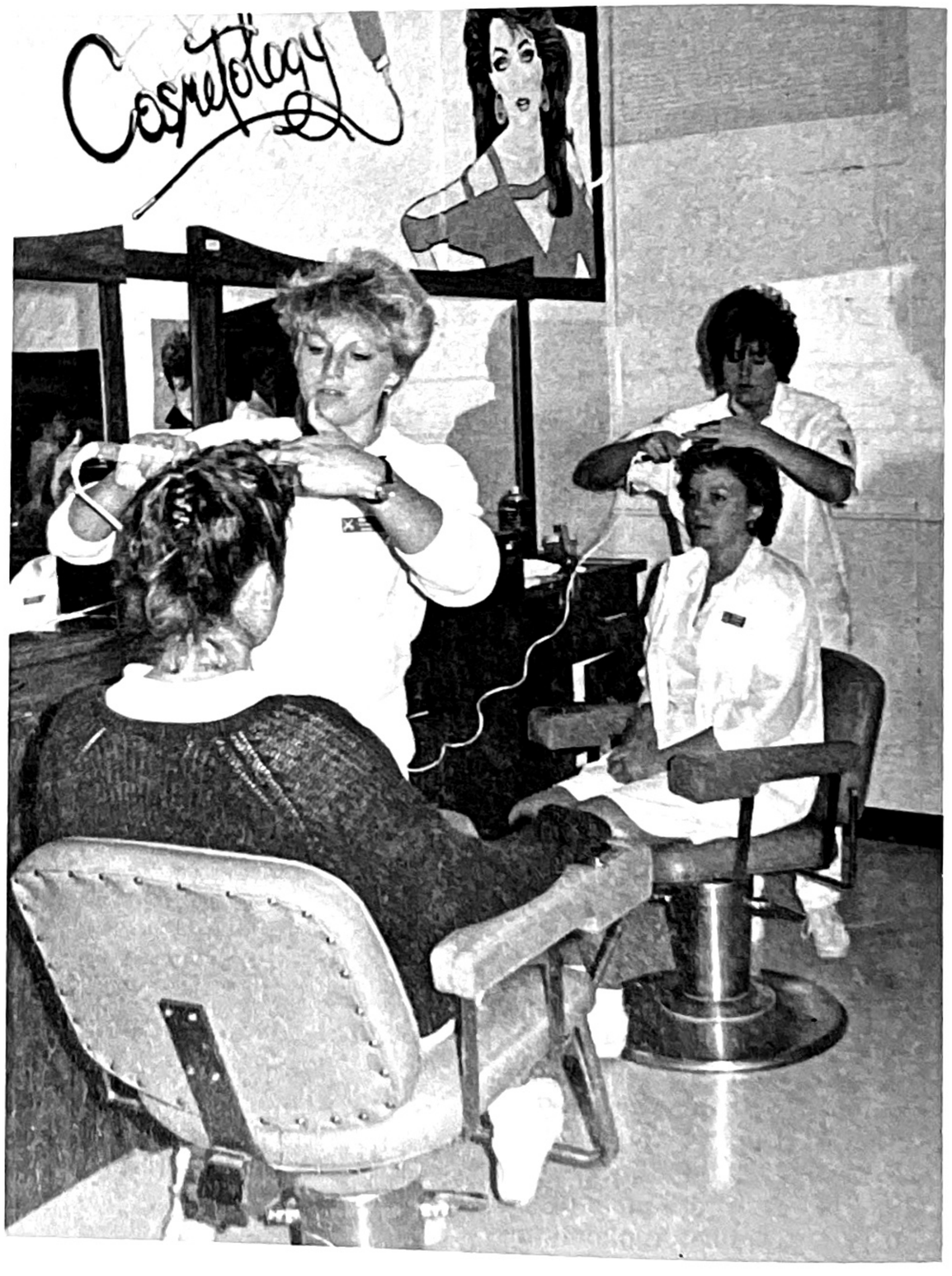
TOTAL CREDITS: 71

AWARD: Diploma at the end of eight quarters.
Certificate at the end of six quarters if the student elects not to take the general education courses.

CURRICULUM BY QUARTERS

		HOURS			
		Class	Lab	Shop	Credit
FIRST QUARTER					
COS 1001	Scientific Study	5	0	0	5
COS 1511	Clinical Applications	0	0	15	5
		5	0	15	10

SECOND QUARTER					
COS 1002	Scientific Study	5	0	0	5
COS 1512	Clinical Applications	0	0	15	5
		5	0	15	10
THIRD QUARTER					
COS 1003	Scientific Study	5	0	0	5
COS 1513	Clinical Applications	0	0	15	5
		5	0	15	10
FOURTH QUARTER					
COS 1004	Scientific Study	5	0	0	5
COS 1514	Clinical Applications	0	0	15	5
		5	0	15	10
FIFTH QUARTER					
COS 1515	Clinical Applications	0	0	15	5
ENG 1106	Fundamentals of English	3	0	0	3
		3	0	15	8
SIXTH QUARTER					
COS 1516	Clinical Applications	0	0	15	5
PSY 109	Human Relations	3	0	0	3
		3	0	15	8
SEVENTH QUARTER					
COS 1517	Clinical Applications	0	0	15	5
MAT 103	Foundation Skills for Algebra	3	0	0	3
		3	0	15	8
EIGHTH QUARTER					
COS 1518	Clinical Applications	0	0	12	4
***	*** Related Elective	3	0	0	3
		3	0	12	7



CRIMINAL JUSTICE
PROTECTIVE SERVICES TECHNOLOGY
T-129

The Criminal Justice Technology curriculum is designed so that it may be a multi-faceted program of study. It may consist of study options in corrections, law enforcement and security services.

The curriculum is designed with a core of courses to afford one the opportunity to acquire basic knowledge, skills and attitudes in the generally accepted subject areas associated with a two-year study of correctional services, law enforcement services and security services. It includes subjects such as interpersonal communications, law, psychology and sociology.

In addition to core subjects, the correctional services option provides an opportunity to study other generally accepted subjects indigenous to a two-year correctional services program such as confinement facility administration, correctional law, counseling, probation-parole services and rehabilitation options. Similarly, the law enforcement option provides an opportunity to study other generally accepted subjects included in a two-year law enforcement services program such as criminal behavior, criminal investigation, patrol operation, traffic management, and other aspects of law enforcement administration and operations. The security services option provides an opportunity to study other generally accepted subjects related to a two-year security services program such as accident prevention and safety management, common carrier protection, fire prevention, private security, industrial security, retail security, security systems and surveillance.

Job opportunities are available with federal, state, county and municipal governments. In addition, knowledge, skills and attitudes acquired in this course of study qualify one for job opportunities with private enterprise in such areas as industrial, retail and private security.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
CJC 101	Introduction to Criminal Justice	5	0	0	5
CJC 102	Criminal Justice Communications	5	0	0	5
CJC 103	Constitutional Law	5	0	0	5
CJC 105	Criminology	5	0	0	5
CJC 106	Criminal Law	5	0	0	5
CJC 201	Ethics and Community Relations	5	0	0	5
CJC 206	Substance Abuse	5	0	0	5
CJC 207	Juvenile Delinquency	5	0	0	5
CJC 208	Judicial Process	5	0	0	5
CJC 210	Organizational Theory and Behavior	5	0	0	5
CJC 214	Criminal Justice Planning	3	0	0	3
*** ***	Technical Electives	8	8	0	12
		61	8	0	65
RELATED COURSES:					
BUS 102	Typing I	2	3	0	3
DAT 100	Introduction to Drug and Alcohol Studies	4	2	0	5
EDP 102	Computer Literacy for Beginners	1	2	0	2
MAT 112	College Math	5	0	0	5
ORI 101	College Orientation	1	0	0	1
POL 103	National, State and Local Government	3	0	0	3
PSY 240	Behavior Modification	5	2	0	6
SOC 101	Introduction to Sociology	3	0	0	3
		24	9	0	28
GENERAL EDUCATION COURSES:					
ENG 110	Freshman Composition I	5	0	0	5
ENG 112	Freshman Composition II	5	0	0	5
ENG 103	Report Writing	3	0	0	3
ENG 204	Oral Communications	3	0	0	3
PSY 103	General Psychology	5	0	0	5
		21	0	0	21

WORK EXPERIENCE:					
CJC 108	Criminal Justice Field Training	0	0	20	2
TECHNICAL ELECTIVES:					
CJC 104	Investigative Photography	1	4	0	3
CJC 109	Introduction to Corrections	3	0	0	3
CJC 110	Community Based Correction	3	0	0	3
CJC 111	Counseling Techniques	1	4	0	3
CJC 112	Health and Wellness	1	4	0	3
CJC 202	Criminal Investigation	1	4	0	3
CJC 203	Interviewing	1	4	0	3
CJC 204	Criminalistics	1	4	0	3
CJC 205	Special Topics Seminar	1	4	0	3
CJC 209	Criminal Evidence and Procedure	1	4	0	3
CJC 211	Vehicle Accident Investigation	1	4	0	3
CJC 212	Confinement Facility Administration	3	0	0	3
CJC 213	Law Enforcement Operations	1	4	0	3
TOTAL CREDITS:					116

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
CJC 101	Introduction to Criminal Justice	5	0	0	5
ENG 110	Freshman Composition I	5	0	0	5
BUS 102	Typing I	2	3	0	3
DAT 100	Introduction to Drug and Alcohol Studies	4	2	0	5
ORI 101	College Orientation	1	0	0	1
		17	5	0	19
SECOND QUARTER					
CJC 103	Constitutional Law	5	0	0	5
ENG 112	Freshman Composition II	5	0	0	5
MAT 112	College Math	5	0	0	5
***	*** Technical Elective	1	4	0	3
		16	4	0	18
THIRD QUARTER					
CJC 105	Criminology	5	0	0	5
ENG 103	Report Writing	3	0	0	3
CJC 106	Criminal Law	5	0	0	5
CJC 102	Criminal Justice Communications	5	0	0	5
		18	0	0	18
FOURTH QUARTER					
CJC 108	Criminal Justice Field Training	0	0	20	2
CJC 214	Criminal Justice Planning	3	0	0	3
***	*** Technical Elective	3	0	0	3
		6	0	20	8
FIFTH QUARTER					
CJC 201	Ethics and Community Relations	5	0	0	5
PSY 103	General Psychology	5	0	0	5
SOC 101	Introduction to Sociology	3	0	0	3
ENG 204	Oral Communications	3	0	0	3
EDP 102	Computer Literacy for Beginners	1	2	0	2
		17	2	0	18
SIXTH QUARTER					
CJC 206	Substance Abuse	5	0	0	5
POL 103	National, State and Local Government	3	0	0	3
PSY 240	Behavior Modification	5	2	0	6
***	*** Technical Elective	1	4	0	3
		14	6	0	17
SEVENTH QUARTER					
CJC 208	Judicial Process	5	0	0	5
CJC 210	Organizational Theory and Behavior	5	0	0	5
CJC 207	Juvenile Delinquency	5	0	0	5
***	*** Technical Elective	3	0	0	3
		18	0	0	18

DEVELOPMENTAL STUDIES

PURPOSE

The Developmental Program is a series of courses designed for students who, at their present educational level, either cannot enter regular curriculum courses or need help in a particular curriculum area. This program gives every person the opportunity of re-entering school and meeting requirements of the world of work and of further education. The courses are structured to meet individual needs and placement of a student in a course of studies depends upon the person's level of achievement when he registers for the course. Emphasis is placed on reading, math, and English. The student may select other electives which he may need to meet his particular objective. The program also assists students who have a physical handicap or who have a personal situation that would put them at a disadvantage in getting the vocational training they want.

New student applicants are required to take a standardized placement examination prior to enrollment in curriculum programs. Test results will be used to determine which (if any) developmental courses may need to be completed prior to enrollment in related first quarter subjects. These developmental requirements may extend the total time for graduation by one or two quarters for full-time students.

OBJECTIVE

1. To encourage students to develop study skills, test taking proficiencies, and to give them a general idea of what will be expected in the world of work.
2. To enable students to assess potentials so that they can make wise vocational choices.
3. To provide individual instruction and tutoring for students in the program who have specific problems not common to the whole class and such reinforcement for students who have already completed the program; or for students encountering similar difficulties in any other curriculum.
4. To provide enrichment courses in communications, mathematics, and reading for high school graduates who are planning to enter a university.

ADMISSION

The Student Success Center is open day and evening hours. A student may register for as many hours as his time allows.

Any applicant wishing to enroll in Developmental Studies should follow the application procedures.

DEVELOPMENTAL SUBJECTS

		HOURS		
		Class	Lab	Credit
READING				
DVS 070	Basic Reading I	0	5	2
DVS 071	Reading Skills I	0	5	2
DVS 072	Reading Skills II	0	5	2
ENG 010	Reading	0	5	2
ENGLISH				
ENG 080	Developmental English I	0	5	2
ENG 081	Developmental English II	0	5	2
ENG 082	Developmental English III	0	5	2
ENG 083	Developmental English IV	0	5	2
ENG 011	Basic Grammar	0	5	2
MATHEMATICS				
MAT 080	Developmental Math I	0	5	2
MAT 081	Developmental Math II	0	5	2
MAT 082	Developmental Math III	0	5	2
MAT 100	Basic Math	5	0	5

DRUG AND ALCOHOL TECHNOLOGY
T-140

The Drug and Alcohol Abuse Technology curriculum prepares graduates to assist in the areas of alcohol and drug education, counseling, and rehabilitation in rehabilitation centers or units, mental health facilities or in community-based programs.

Graduates work with individuals who are disabled physically and emotionally by drug or alcohol abuse to help them regain a useful place in their home and community and find gainful employment and engage in community activities, to interest employers to help and hire disabled individuals, to help the community to be aware of the problems of the disabled, and to assist in patient and office records maintenance and perform basic health care skills.

Individuals desiring a career in assisting individuals with drug and alcohol abuse disabilities should, if possible, take biology, sociology and psychology courses prior to entering the program.

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Clinic	Credit
MAJOR COURSES:					
DAT 100	Introduction to Drug and Alcohol Studies	4	2	0	5
DAT 102	Contemporary Social Problems	5	0	0	5
DAT 110	Pathophysiological Effects of Drugs and Alcohol	3	0	0	3
DAT 116	Substance Abuse	3	0	0	3
DAT 120	Interviewing and Counseling I	5	0	0	5
DAT 121	Interviewing and Counseling II	5	0	0	5
DAT 122	Interviewing and Counseling III	5	0	0	5
DAT 126	Crisis Intervention	3	4	0	5
DAT 130	Human and Social Services	3	0	0	3
DAT 200	Techniques of Drug and Alcohol Education	5	0	3	6
DAT 202	Behavior Modification	5	0	0	5
DAT 220	Counseling and Rehabilitating the Chemically Dependent	4	0	3	5
DAT 225	Drug and Alcohol Seminar	3	0	0	3
DAT 124	Health Care Skills	1	6	0	4
		54	12	6	62
RELATED COURSES:					
BIO 100	Basic Biology	5	0	0	5
BIO 102	Anatomy and Physiology I	4	2	0	5
EDU 136	Marriage and Family Relations	5	0	0	5
MAT 110	Business Math	5	0	0	5
ORI 101	College Orientation	1	0	0	1
		20	2	0	21
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
PSY 103	General Psychology	5	0	0	5
PSY 203	Human Growth and Development	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
		23	0	0	23
WORK EXPERIENCE:					
DAT 230	Drug and Alcohol Internship	0	0	20	2
ELECTIVES:		5	0	0	5
TOTAL CREDITS:					113

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER					
DAT 100	Introduction to Drug and Alcohol Studies	4	2	0	5
BIO 100	Basic Biology	5	0	0	5
ENG 101	Language and Composition I	5	0	0	5
PSY 103	General Psychology	5	0	0	5
ORI 101	College Orientation	1	0	0	1
		20	2	0	21
SECOND QUARTER					
DAT 110	Pathophysiological Effects of Drugs and Alcohol	3	0	0	3
PSY 203	Human Growth and Development	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
***	*** Elective	5	0	0	5
		18	0	0	18
THIRD QUARTER					
DAT 120	Interviewing and Counseling I	5	0	0	5
DAT 126	Crisis Intervention	3	4	0	5
DAT 102	Contemporary Social Problems	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
		16	4	0	18
FOURTH QUARTER					
DAT 230	Drug and Alcohol Internship	0	0	20	2
FIFTH QUARTER					
DAT 121	Interviewing and Counseling II	5	0	0	5
DAT 130	Human and Social Services	3	0	0	3
BIO 102	Anatomy and Physiology I	4	2	0	5
MAT 110	Business Math	5	0	0	5
		17	2	0	18



SIXTH QUARTER					
DAT 116	Substance Abuse	3	0	0	3
DAT 200	Techniques of Drug and Alcohol Education	5	0	3	6
DAT 220	Counseling and Rehabilitating the Chemically Dependent	4	0	3	5
DAT 202	Behavior Modification	5	0	0	5
		17	0	6	19
SEVENTH QUARTER					
DAT 124	Health Care Skills	1	6	0	4
DAT 122	Interviewing and Counseling III	5	0	0	5
DAT 225	Drug and Alcohol Seminar	3	0	0	3
EDU 136	Marriage and Family Relations	5	0	0	5
		14	6	0	17

88-91

EARLY CHILDHOOD ASSOCIATE
T-073

The Early Childhood Associate curriculum prepares individuals to work with programs and/or centers concerned with the care and development of infants and young children. Through study and application in such areas as child growth and development, physical and nutritional needs of children, care and guidance of children and communication with children and their parents, individuals will be able to function effectively in various programs and/or centers dealing with preschool children.

Job opportunities are available in such areas as day care centers, nursery schools, kindergartens, child development centers, hospitals, rehabilitation clinics, evaluation clinics, camps and recreational centers.

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Credit
MAJOR COURSES:				
EDU 101	Child Growth and Development I	5	0	5
EDU 104	Introducing Reading	3	0	3
EDU 131	Child Growth and Development II	5	0	5
EDU 208	Physical Activities for Young Children	3	0	3
EDU 103	Working With Young Children	4	6	7
EDU 222	Media Resources and Library Skills	2	0	2
EDU 200	Seminar	5	0	5
EDU 201	Activities for Young Children	5	6	8
EDU 209	Child Management	3	0	3
EDU 100	Reading Assistant	4	0	4
EDU 211	Children's Literature	3	0	3
EDU 203	The Exceptional Child	3	0	3
EDU 213	Curriculum Development for Young Children	3	2	4
EDU 214	Art for Young Children	0	3	1
***	*** Technical Elective	3	0	3
		51	17	59
RELATED COURSES:				
EDU 133	The Family — A Cross Cultural Survey	3	2	4
EDU 135	The Family and the Community	4	0	4
SCI 101	General Science	3	2	4
MAT 112	College Math	5	0	5
ORI 101	College Orientation	1	0	1
NUT 102	Nutrition and Health for Young Children	3	0	3
NUR 110	First Aid	3	0	3
***	*** Related Elective	2	0	2
		24	4	26
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 109	Human Relations	3	0	3
HIS 211	United States History I	5	0	5
***	*** General Education Elective	3	0	3
		24	0	24
WORK EXPERIENCE:				
EDU 202	Practicum	0	20	2
TECHNICAL ELECTIVES:				
EDU 204	Parent Education	3	0	3
EDU 207	Special Problems in Early Childhood	3	0	3
EDU 212	Day Care Administration	3	0	3
RELATED ELECTIVES:				
EDP 102	Computer Literacy for Beginners	1	2	2
EDU 136	Marriage and Family Relations	5	0	5
EDU 210	The Child and Community Services	3	0	3
TOTAL CREDITS:				111

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
EDU 101	Child Growth and Development I	5	0	5
EDU 133	The Family — A Cross Cultural Survey	3	2	4
EDU 222	Media Resources and Library Skills	2	0	2
ORI 101	College Orientation	1	0	1
SCI 101	General Science	3	2	4
		19	4	21
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
EDU 131	Child Growth and Development II	5	0	5
EDU 208	Physical Activities for Young Children	3	0	3
PSY 109	Human Relations	3	0	3
EDU 213	Curriculum Development for Young Children	3	2	4
		19	2	20
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
EDU 103	Working With Young Children	4	6	7
EDU 104	Introducing Reading	3	0	3
EDU 135	The Family and the Community	4	0	4
MAT 112	College Math	5	0	5
		19	6	22
FOURTH QUARTER				
EDU 201	Activities for Young Children	5	6	8
EDU 100	Reading Assistant	4	0	4
EDU 209	Child Management	3	0	3
EDU 214	Art for Young Children	0	3	1
HIS 211	United States History I	5	0	5
***	*** Related Elective	2	0	2
		19	9	23
FIFTH QUARTER				
EDU 211	Children's Literature	3	0	3
EDU 203	The Exceptional Child	3	0	3
NUT 102	Nutrition and Health for Young Children	3	0	3
NUR 110	First Aid	3	0	3
***	*** Technical Elective	3	0	3
***	*** General Education Elective	3	0	3
		18	0	18
SIXTH QUARTER				
EDU 202	Practicum	0	20	2
EDU 200	Seminar	5	0	5
		5	20	7



ELECTRICAL INSTALLATION AND MAINTENANCE
V-018

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

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

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
ELC 1112	AC and DC Circuits (Theory and Practice)	7	0	6	9
ELC 1108	Residential Wiring	7	0	6	9
ELC 1113	AC-DC Machines	7	0	6	9
ELC 1116	Industrial Electronics	7	0	6	9
ELC 1118	Commercial/Industrial Controls	4	0	6	6
ELC 1119	Programmable Controllers	4	0	6	6
*** ***	Technical Elective	3	0	0	3
		39	0	36	51
RELATED COURSES:					
MAT 1115	Electrical Math	3	0	0	3
DFT 1109	Blueprint Reading: Electrical	2	2	0	3
ISC 1101	Industrial Safety	3	2	0	4
MAT 1118	Estimating: Electrical	2	0	0	2
ORI 101	College Orientation	1	0	0	1
BUS 237	Small Business Management	3	2	0	4
		14	6	0	17
GENERAL EDUCATION COURSES:					
ENG 1111	Reading Comprehension	2	0	0	2
PHY 1101	Applied Science I	3	2	0	4
PSY 109	Human Relations	3	0	0	3
		8	2	0	9
WORK EXPERIENCE:					
TECHNICAL ELECTIVES:					
ELC 1123	Electrical and Control Systems	1	2	0	2
ELC 1125	Electrical Troubleshooting	2	0	3	3
ELC 1126	Preventative Maintenance for Environmental Systems	5	0	9	8
TOTAL CREDITS:					77
AWARD:					Diploma

CURRICULUM BY QUARTERS

		HOURS Class	Lab	Shop	Credit
FIRST QUARTER					
ELC 1112	AC and DC Circuits (Theory and Practice)	7	0	6	9
MAT 1115	Electrical Math	3	0	0	3
ORI 101	College Orientation	1	0	0	1
		11	0	6	13

SECOND QUARTER

DFT 1109	Blueprint Reading: Electrical	2	2	0	3
ELC 1108	Residential Wiring	7	0	6	9
		9	2	6	12

THIRD QUARTER

ELC 1113	AC-DC Machines	7	0	6	9
ISC 1101	Industrial Safety	3	2	0	4
		10	2	6	13

FOURTH QUARTER

ELC 1116	Industrial Electronics	7	0	6	9
MAT 1118	Estimating: Electrical	2	0	0	2
		9	0	6	11

FIFTH QUARTER

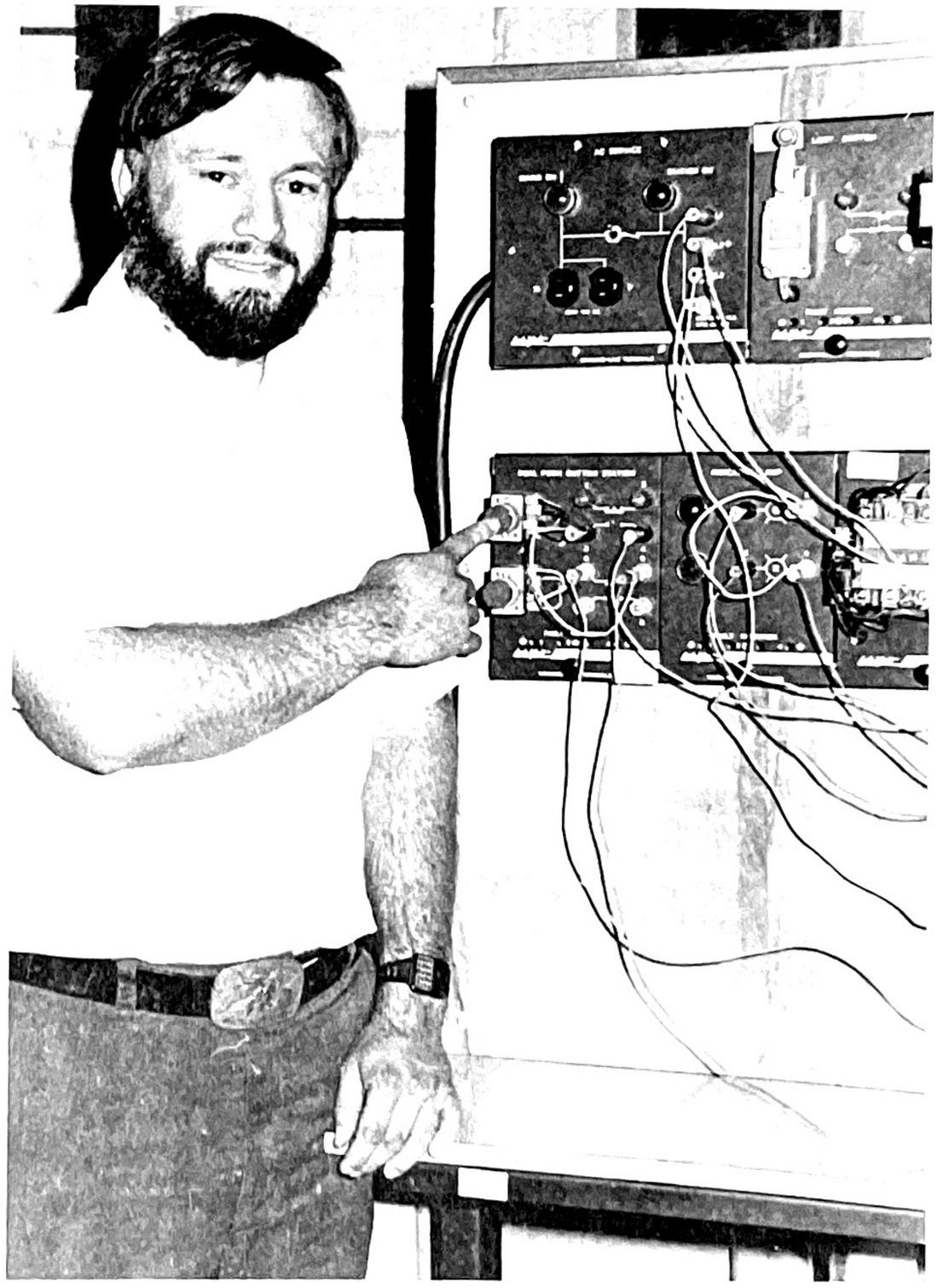
ELC 1118	Commercial/Industrial Controls	4	0	6	6
PHY 1101	Applied Science I	3	2	0	4
		7	2	6	10

SIXTH QUARTER

ELC 1119	Programmable Controllers	4	0	6	6
BUS 237	Small Business Management	3	2	0	4
		7	2	6	10

SEVENTH QUARTER

ENG 1111	Reading Comprehension	2	0	0	2
PSY 109	Human Relations	3	0	0	3
*** ***	Technical Elective	3	0	0	3
		8	0	0	8



ELECTRODIAGNOSTICS TECHNOLOGY
T-203

The Electrodiagnostics Technology curriculum is designed to provide paraprofessional training in the operation and application of electrodiagnostic monitoring equipment. Specifically, individuals are trained to electrically monitor cardiopulmonary and brain function through the use of the electrocardiogram, electroencephalogram, and other monitoring devices, such as stress testing equipment.

The Electrodiagnostics Technician performs under the supervision of a qualified physician. The graduate may be employed in a physician's office, hospital, health clubs, health maintenance organizations, medical research labs, industrial clinics, or in long-term health care facilities.

Individuals desiring a career as an Electrodiagnostics Technician should, if possible, take courses in biology and algebra prior to entering the curriculum.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Clinic	Credit
MAJOR COURSES:					
EDT 101	Orientation to Electrodiagnostics	3	0	0	3
EDT 102	Management of Medical Emergencies	2	2	0	3
EDT 103	Neurophysiology	4	2	0	5
EDT 104	Principles of Neurotransmission	4	2	0	5
EDT 105	Electrodiagnostics Seminar	4	0	0	4
EDT 107	Laboratory Management	2	0	0	2
EDT 108	Legal and Ethical Issues	2	0	0	2
EDT 110	Clinical Experience I	0	0	12	4
EDT 111	Clinical Experience II	0	0	15	5
EDT 112	Clinical Experience III	0	0	18	6
		21	6	45	39
RELATED COURSES:					
BIO 102	Anatomy and Physiology I	4	2	0	5
MLT 110	Medical Terminology	3	0	0	3
RTH 103	Cardiopulmonary Physiology	4	2	0	5
RDT 106	Pathophysiology	4	0	0	4
ORI 101	College Orientation	1	0	0	1
		16	4	0	18
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
		10	0	0	10
WORK EXPERIENCE:					
ELECTIVES:					0
TOTAL CREDITS:					67
AWARD:					Diploma

CURRICULUM BY QUARTERS

		HOURS Class	Lab	Clinic	Credit
FIRST QUARTER					
EDT 101	Orientation to Electrodiagnostics	3	0	0	3
EDT 102	Management of Medical Emergencies	2	2	0	3
BIO 102	Anatomy and Physiology I	4	2	0	5
MLT 110	Medical Terminology	3	0	0	3
ENG 101	Language and Composition I	5	0	0	5
ORI 101	College Orientation	1	0	0	1
		18	4	0	20

SECOND QUARTER

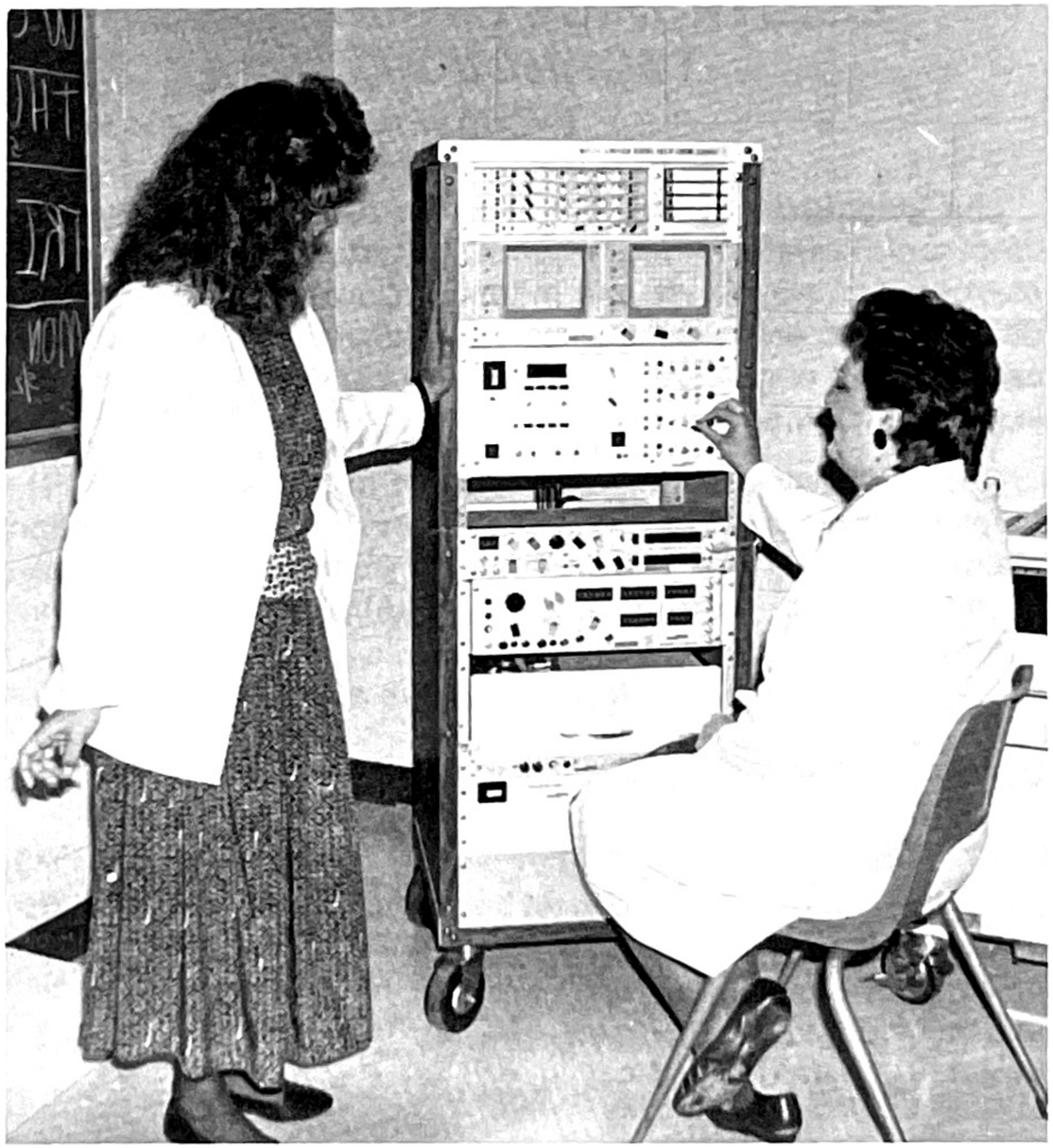
RTH 103	Cardiopulmonary Physiology	4	2	0	5
ENG 102	Language and Composition II	5	0	0	5
EDT 110	Clinical Experience I	0	0	12	4
EDT 107	Laboratory Management	2	0	0	2
		11	2	12	16

THIRD QUARTER

EDT 103	Neurophysiology	4	2	0	5
EDT 104	Principles of Neurotransmission	4	2	0	5
EDT 111	Clinical Experience II	0	0	15	5
RDT 106	Pathophysiology	4	0	0	4
		12	4	15	19

FOURTH QUARTER

EDT 108	Legal and Ethical Issues	2	0	0	2
EDT 112	Clinical Experience III	0	0	18	6
EDT 105	Electrodiagnostics Seminar	4	0	0	4
		6	0	18	12



ELECTRONICS ENGINEERING TECHNOLOGY
T-045

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

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

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Shop	Credit
MAJOR COURSES:					
ELN 102	Introduction to Electronics	5	4	0	7
ELN 104	Circuit Analysis	5	4	0	7
ELN 106	Solid State Devices	5	4	0	7
ELN 110	Basic Troubleshooting	3	2	0	4
ELN 201	Electronic Circuits	5	4	0	7
ELN 109	Digital Logic Circuits I	3	2	0	4
ELN 204	Electronic Communications	5	4	0	7
ELN 224	Electronic Layout and Design	0	0	3	1
ELN 209	Digital Logic Circuits II	3	2	0	4
ELN 207	Advanced Electronics	5	4	0	7
ELN 225	Advanced Troubleshooting Procedures	2	0	6	4
ELN 217	Industrial Electronics and Controls	5	4	0	7
ELN 221	Two-Way Radio Systems	3	2	0	4
***	*** Technical Elective	4	0	0	4
		53	36	9	74
RELATED COURSES:					
MAT 115	Electrical Math I	5	0	0	5
DFT 101	Technical Drafting I	0	0	6	2
MAT 116	Electrical Math II	5	0	0	5
MAT 117	Electrical Math III	5	0	0	5
MAT 119	Mathematics of Computer Systems	3	0	0	3
PHY 102	Physics: Heat, Sound and Light	3	2	0	4
PHY 103	Physics: Electricity and Magnetism	3	2	0	4
ORI 101	College Orientation	1	0	0	1
***	*** Related Elective	3	0	0	3
		28	4	6	32
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 103	Report Writing	3	0	0	3
ENG 204	Oral Communications	3	0	0	3
***	*** Social Science Elective	3	0	0	3
		19	0	0	19
WORK EXPERIENCE:					0
TECHNICAL ELECTIVES:					
ELN 112	Electronics Practicum	0	10	0	1
ELN 220	Antenna Design	3	2	0	4
ELN 237	Microprocesor Interfacing	3	0	3	4
ELN 222	Special Project Building I	0	4	0	2
ELN 223	Special Project Building II	0	4	0	2
ELN 130	Converter Fundamentals and Design	3	2	0	4
ELN 132	Test Instruments	1	0	3	2
ELN 133	Communication Circuits	3	2	0	4
ELN 131	Converter Analysis	3	2	0	4

ELN 240	Advanced Microprocessor Design	3	0	3	4
ELN 238	Microcontroller Design	3	0	3	4
ELN 239	Digital Communications	3	2	0	4
ELN 205	Computer Repair	2	4	0	4
ELN 234	Electronic Fabrication	0	0	3	1
COE 101	Cooperative Work Experience*	0	10	0	1
COE 102	Cooperative Work Experience*	0	20	0	2

RELATED ELECTIVES:

EDP 106	BASIC Programming	2	2	0	3
ELN 210	TV Systems Analysis	5	4	0	7
MEC 160	Introduction to Robotics	1	0	6	3

TOTAL CREDITS: 125

AWARD: Associate of Applied Science Degree

*Co-op Option: Qualified students may elect to take up to four credit hours of Cooperative Education. These hours of Cooperative Education may be substituted for any technical or related elective.

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
ENG 101	Language and Composition I	5	0	0	5
MAT 115	Electrical Math I	5	0	0	5
ELN 102	Introduction to Electronics	5	4	0	7
DFT 101	Technical Drafting I	0	0	6	2
ORI 101	College Orientation	1	0	0	1
		16	4	6	20
SECOND QUARTER					
ENG 102	Language and Composition II	5	0	0	5
MAT 116	Electrical Math II	5	0	0	5
ELN 104	Circuit Analysis	5	4	0	7
		15	4	0	17
THIRD QUARTER					
ENG 204	Oral Communications	3	0	0	3
MAT 117	Electrical Math III	5	0	0	5
ELN 106	Solid State Devices	5	4	0	7
ELN 110	Basic Troubleshooting	3	2	0	4
		16	6	0	19
FOURTH QUARTER					
ELN 201	Electronic Circuits	5	4	0	7
MAT 119	Mathematics of Computer Systems	3	0	0	3
ELN 109	Digital Logic Circuits I	3	2	0	4
ELN 217	Industrial Electronics and Controls	5	4	0	7
		16	10	0	21
FIFTH QUARTER					
ELN 204	Electronic Communications	5	4	0	7
ELN 224	Electronic Layout and Design	0	0	3	1
PHY 102	Physics: Heat, Sound and Light	3	2	0	4
***	*** Social Science Elective	3	0	0	3
		11	6	3	15
SIXTH QUARTER					
PHY 103	Physics: Electricity and Magnetism	3	2	0	4
ELN 209	Digital Logic Circuits II	3	2	0	4
ELN 221	Two-Way Radio Systems	3	2	0	4
***	*** Related Elective	3	0	0	3
		12	6	0	15
SEVENTH QUARTER					
ELN 207	Advanced Electronics	5	4	0	7
ENG 103	Report Writing	3	0	0	3
ELN 225	Advanced Troubleshooting Procedures	2	0	6	4
***	*** Technical Elective	4	0	0	4
		14	4	6	18

ENVIRONMENTAL SCIENCE TECHNOLOGY T-103

The Environmental Science curriculum provides a broad background in environmentally oriented courses including air, water, and soil pollution analysis and control. Emphasis is placed on the interrelationship of environmental problems, the overall effect of these problems and proposed solutions to these problems.

The training will qualify students to conduct a wide range of duties such as inspections, surveys, investigations and evaluations. Specific tasks include water and air sampling and analysis, assisting professionals in performing environmental research, operating and maintaining treatment facilities and collecting and evaluating environmental impact data. Employment opportunities exist with industry and many branches of our local, state and federal government.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Credit
MAJOR COURSES:				
BIO 101	General Biology	3	4	5
CHM 101	Chemistry I	3	4	5
CHM 102	Chemistry II	3	4	5
ENV 120	Land Resource Management	3	4	5
ENV 130	Microbiology	3	4	5
ENV 207	Water Analysis and Treatment	3	2	4
ENV 208	Fisheries Management	3	2	4
ENV 210	Ecology	3	2	4
ENV 213	Air Sampling, Analysis and Control	3	4	5
ENV 216	Environmental Health	3	2	4
ENV 224	Chemistry of Wastewater	1	6	4
ENV 229	Meterology	3	4	5
ENV 230	Environmental Quality, Laws and Enforcement	3	0	3
ENV 231	Environmental Project	1	12	5
		38	54	63
RELATED COURSES:				
MAT 105	Introduction to Algebra	5	0	5
MAT 108	College Algebra	5	0	5
MAT 104	Statistics	3	0	3
PHY 101	Physics: Mechanics	3	2	4
PHY 102	Physics: Heat Sound, and Light	3	2	4
BGM 1001	Housekeeping Maintenance	1	0	1
***	*** Related Elective	2	0	2
		22	4	24
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
GEO 102	Cultural Geography	5	0	5
		18	0	18
WORK EXPERIENCE:				
ENV 111	Supervised Work Experience	0	20	2
GENERAL ELECTIVES:		3	0	3
RELATED ELECTIVES:				
EDP 102	Computer Literacy for Beginners	1	2	2
BUS 113	Keyboarding	1	2	2
TOTAL CREDITS:				110

AWARD Associate of Applied Science Degree

FACILITY SERVICE TECHNICIAN
V-141

The Facility Service Technician program prepares persons to maintain buildings such as apartment complexes, hotels, hospitals and office complexes. The curriculum includes instruction in electrical, plumbing, heating and air conditioning, carpentry, groundskeeping and structural maintenance.

The graduate should have the job entry level skills necessary for operating and maintaining these facilities.

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Shop	Credit
MAJOR COURSES:					
BGM 1001	Housekeeping Maintenance	5	0	9	8
BGM 1002	Painting and Finishing Techniques	5	0	9	8
BGM 1003	Building and Roofing Repairs	1	0	6	3
BGM 1004	Groundskeeping	1	0	6	3
PLU 1000	Basic Plumbing	2	0	6	4
CAR 1000	Carpentry I	2	0	6	4
WLD 1101	Basic Welding	1	0	3	2
ELC 1123	Electrical and Control Systems	1	0	2	2
MAS 1010	Beginning Masonry	2	0	3	3
ELC 1126	Preventive Maintenance for Environmental Systems	5	0	9	8
*** ***	Technical Elective	3	0	0	3
		28	0	59	48

HOURS

RELATED COURSES:					
MAT 1112	Mathematics: Building Trades	2	0	0	2
ISC 1101	Industrial Safety	3	2	0	4
ORI 101	College Orientation	1	0	0	1
DFT 1110	Blueprint Reading: Building Trades	1	3	0	2
DFT 1109	Blueprint Reading: Electrical	2	2	0	3
		9	7	0	12
GENERAL EDUCATION:					
ENG 1111	Reading Comprehension	2	0	0	2
PHY 1101	Applied Science I	3	2	0	4
		5	2	0	6
WORK EXPERIENCE:					0
TECHNICAL ELECTIVE:					
ELC 1127	Electrical Maintenance Procedures	2	0	3	3
AHR 102	Air Conditioning Systems	2	0	2	3
AHR 1102	Installation and Maintenance of Total Comfort Systems	3	0	9	6
AHR 1118	Heating and Cooling Load Calculations	3	0	0	3
TOTAL CREDITS:					66
AWARD:					Diploma

FASHION MERCHANDISING AND MARKETING
T-143

The Fashion Merchandising and Marketing curriculum is designed to provide individuals with fundamental skills in fashion and merchandising activities. The individual will become familiar with the properties, characteristics and construction of fabrics, leather, fur, millinery, wigs, jewelry and cosmetics. Emphasis will be placed on selling techniques, buying, merchandising, displaying, pricing and stock planning and control.

Employment opportunities as assistant buyers, buyers, fashion coordinators, fashion stylists, indoor display specialists, merchandise clerks and store managers or owners will be available in department stores and specialty stores, wholesale and manufacturing firms, buying offices and advertising agencies.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
FAS 101	Intro. to Fashion Merchandising/ Marketing	4	0	4
FAS 103	Elements and Coordination of Fashion	4	0	4
FAS 104	Fashion Accessories	4	0	4
FAS 110	Fabric Science I	4	0	4
FAS 112	Fashion Salesmanship	3	0	3
FAS 116	Fashion Sketching	2	2	3
FAS 117	Commercial Display Design	2	3	3
FAS 210	Fabric Science II	4	0	4
FAS 212	Professional Wardrobe Analysis	1	0	1
FAS 214	Personal Selling of Fashion	3	0	3
FAS 216	Fashion Sales Promotion I	4	0	4
FAS 217	Fashion Sales Promotion II	4	0	4
FAS 220	Applied Fashion Merchandising	2	2	3
FAS 222	History and Psychology of Dress	3	0	3
FAS 224	Fashion Buying and Merchandising	3	0	3
		47	7	50
RELATED COURSES:				
BUS 101	Introduction to Business	5	0	5
BUS 102	Typing I	2	3	3
PSY 109	Human Relations	3	0	3
BUS 152	Consumer Awareness	3	0	3
BUS 237	Small Business Management	3	2	4
BUS 248	Business Economics I	5	0	5
CAT 101	Advertising Principles	3	0	3
CAT 102	Art and Design	2	6	4
CAT 105	Basic Drawing	2	3	3
EDP 104	Introduction to Data Processing	3	2	4
MAT 110	Business Math	5	0	5
		36	16	42
GENERAL EDUCATION COURSES:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 103	General Psychology	5	0	5
		18	0	18
WORK EXPERIENCE:				
FAS 201	Seminar/Practicum	5	10	6
ELECTIVES:		0	0	0
TOTAL CREDITS:				116

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
BUS 101	Introduction to Business	5	0	5
ENG 101	Language and Composition I	5	0	5
FAS 101	Intro. to Fashion Merchandising/ Marketing	4	0	4
MAT 110	Business Math	5	0	5
		19	0	19
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
CAT 105	Basic Drawing	2	3	3
FAS 103	Elements and Coordination of Fashion	4	0	4
FAS 104	Fashion Accessories	4	0	4
EDP 104	Introduction to Data Processing	3	2	4
		18	5	20
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 152	Consumer Awareness	3	0	3
FAS 110	Fabric Science I	4	0	4
FAS 112	Fashion Salesmanship	3	0	3
FAS 116	Fashion Sketching	2	2	3
FAS 117	Commercial Display Design	2	3	3
		17	5	19
FOURTH QUARTER				
FAS 201	Seminar/Practicum	5	10	6
FIFTH QUARTER				
BUS 248	Business Economics I	5	0	5
BUS 102	Typing I	2	3	3
CAT 102	Art and Design	2	6	4
CAT 101	Advertising Principles	3	0	3
FAS 210	Fabric Science II	4	0	4
		16	9	19
SIXTH QUARTER				
PSY 109	Human Relations	3	0	3
BUS 237	Small Business Management	3	2	4
FAS 212	Professional Wardrobe Analysis	1	0	1
FAS 214	Personal Selling of Fashion	3	0	3
FAS 216	Fashion Sales Promotion I	4	0	4
PSY 103	General Psychology	5	0	5
		19	2	20
SEVENTH QUARTER				
FAS 217	Fashion Sales Promotion II	4	0	4
FAS 220	Applied Fashion Merchandising	2	2	3
FAS 222	History and Psychology of Dress	3	0	3
FAS 224	Fashion Buying and Merchandising	3	0	3
		12	2	13



FOODSERVICE MANAGEMENT
T-074

FOODSERVICE SPECIALIST
V-053*

The Foodservice Management curriculum trains students at the supervisory or "middle management" level in foodservice with particular emphasis on institutional foodservice. Students completing the first year of this curriculum and desiring additional study in supervision and management may continue for the second year or exit after the fourth quarter with a diploma as a Foodservice Specialist.

In addition to having a sound foundation in the science of food preparation and service, students will develop an understanding of the basic science and principles of quantity food preparation, an appreciation of accuracy and the use of standards in production, an increased knowledge of the space and equipment requirements for quantity food production and service operations of various types, and some ability to evaluate the effectiveness of the operation of a foodservice department. Also students will understand pricing and cost controls, principles of nutrition as applied to institutional menu planning, safe methods of work performance and appreciation of sanitation and hygiene in a foodservice operation.

The career opportunities available to a graduate of the Foodservice Management curriculum are dietetic assistant, food science supervisor, foodservice manager, dietary technician, unit manager and chef-manager. Employment opportunities are available in hospitals, nursing homes, child care centers, college and university foodservices, school foodservices, industrial cafeterias, private clubs, airline foodservices, food processing manufacturers, foodservice contract companies and commercial restaurants.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
FSO 101	Orientation to Foodservice	3	0	3
FSO 102	Introduction to Food Preparation	3	6	6
FSO 104	Sanitation and Safety	3	0	3
FSO 112	Food Preparation II	3	6	6
FSO 107	Baking I	2	6	4
FSO 114	Menu Planning and Nutrition	5	0	5
FSO 204	Food Purchasing and Cost Control	5	0	5
FSO 122	Food Preparation III	3	6	6
FSO 117	Baking II	2	6	4
FSO 202	Food Preparation IV	3	6	6
FSO 212	Food Preparation V	3	6	6
FSO 109	Production Management	3	0	3
FSO 141	Hospitality Management	3	0	3
FSO 207	Food Merchandising	4	2	5
FSO 106	Dining Room Procedures	1	3	2
FSO 214	Specialty Cooking	2	4	3
*** ***	Technical Elective	2	0	2
		50	51	72
RELATED COURSES:				
MAT 110	Business Math	5	0	5
BUS 110	Office Machines	1	2	2
EDP 100	Selected Topics in Data Processing	0	2	1
BUS 237	Small Business Management	3	2	4
BUS 120	Accounting I	4	3	5
ORI 101	College Orientation	1	0	1
		14	9	18
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 103	General Psychology	5	0	5
PSY 109	Human Relations	3	0	3
		21	0	21

WORK EXPERIENCE:				
COE 102	Cooperative Work Experience**	0	20	2
ELECTIVE:		3	0	3
TECHNICAL ELECTIVES:				
FSO 103	Equipment Use and Care	3	0	3
FSO 105	Introduction to Garde Manger	1	3	2
RECOMMENDED ELECTIVES:				
COE 101	Cooperative Work Experience	0	10	1
COE 103	Cooperative Work Experience	0	30	3

**Co-op Option: Qualified students may elect to take up to six credit hours of cooperative education, two of which are required. The optional four credit hours may be substituted for any technical or free elective.

TOTAL CREDITS: 116

AWARD: Associate of Applied Science Degree
*Diploma upon completion of the first four quarters

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
FSO 101	Orientation to Foodservice	3	0	3
FSO 102	Introduction to Food Preparation	3	6	6
FSO 104	Sanitation and Safety	3	0	3
ORI 101	College Orientation	1	0	1
MAT 110	Business Math	5	0	5
		20	6	23
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
FSO 112	Food Preparation II	3	6	6
FSO 107	Baking I	2	6	4
FSO 114	Menu Planning and Nutrition	5	0	5
FSO 141	Hospitality Management	3	0	3
		18	12	23
THIRD QUARTER				
FSO 106	Dining Room Procedures	1	3	2
FSO 109	Production Management	3	0	3
FSO 204	Food Purchasing and Cost Control	5	0	5
FSO 122	Food Preparation III	3	6	6
FSO 117	Baking II	2	6	4
		14	15	20
FOURTH QUARTER				
COE 102	Cooperative Work Experience	0	20	2
***	*** Technical Elective	2	0	2
		2	20	4
FIFTH QUARTER				
FSO 202	Food Preparation IV	3	6	6
BUS 110	Office Machines	1	2	2
PSY 103	General Psychology	5	0	5
ENG 204	Oral Communications	3	0	3
		12	8	16
SIXTH QUARTER				
BUS 120	Accounting I	4	3	5
EDP 100	Selected Topics in Data Processing	0	2	1
FSO 212	Food Preparation V	3	6	6
PSY 109	Human Relations	3	0	3
		10	11	15
SEVENTH QUARTER				
BUS 237	Small Business Management	3	2	4
FSO 207	Food Merchandising	4	2	5
FSO 214	Specialty Cooking	2	4	3
***	*** Elective	3	0	3
		12	8	15

GENERAL EDUCATION
G-020

The General Education Program is designed for individuals who wish to broaden their education with emphasis on personal interest, growth, and development. This program provides for a basic exposure to liberal studies (general education) and enables the student to tailor the program beyond that point to personal interests rather than specific technical or professional requirements. It is also beneficial to those students who wish to improve or expand their knowledge of our culture in its many facets.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Credit
MAJOR COURSES: (General Education)				
ECO 110	Contemporary Economic Institutions	5	0	5
ENG 110	Freshman Composition I	5	0	5
ENG 112	Freshman Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
ENG 211	American Literature I	5	0	5
ENG 212	American Literature II	5	0	5
ENG 220	English Literature	5	0	5
ENG 222	Theatre Activities	0	6	2
GEO 102	Cultural Geography	5	0	5
HIS 101	World Civilization I	3	0	3
HIS 211	United States History I	5	0	5
HIS 212	United States History II	5	0	5
PSY 103	General Psychology	5	0	5
PSY 106	Applied Psychology	5	0	5
SOC 102	Principles of Sociology	5	0	5
		66	6	68

RELATED COURSES:

ART 101	Art Appreciation	3	0	3
BIO 101	General Biology	3	4	5
BIO 201	Botany	4	2	5
EDP 104	Introduction to Data Processing	3	2	4
MAT 108	College Algebra	5	0	5
MUS 101	Music Appreciation	3	0	3
MUS 106	Creative Listening Experiences	0	3	1
MUS 108	Chorus	0	3	1
MUS 109	Music Today	3	0	3
ORI 101	College Orientation	1	0	1
PED 101	Weight Training	0	2	1
PED 104	Adult Fitness	0	2	1
PED 212	Volleyball	0	2	1
PED 210	Basketball	0	2	1
PHI 101	Introduction to Philosophy	3	0	3
REC 100	Recreation Activities I	0	10	3
REC 101	Recreation Activities II	0	10	3
REC 145	Aerobic Conditioning I	0	2	1
REC 146	Aerobic Conditioning II	0	2	1
		28	46	46

WORK EXPERIENCE: 0 0 0

ELECTIVES:

Science (PHY 101 or CHM 101)	4-5
Science (PHY 102 or CHM 102)	4-5
Leisure and Fitness Elective(s)	6-9
Elective	3-5
	17-24

TOTAL CREDITS: 131-138

AWARD: Associate Degree in General Education

GENERAL TECHNOLOGY CURRICULUM CORE T-201

General Technology Curriculum Core is designed for technical students to acquire the general education and related courses in subject areas such as humanities, communications, social sciences, and theoretical and applied sciences such as biology, chemistry, physics, mathematics, general computer studies and general graphics (drafting) that are foundation courses to specific curriculums in the technical field. The student may take this program prior to enrolling in a specific technical curriculum as an intended objective component of that technical curriculum. The student may also take this program for transfer to a technical curriculum at another community college system institution either prior to or concurrently with enrollment at the institution at which they intend to pursue or are pursuing a technical curriculum degree.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Credit
The student may take 18-22 QHC from the following courses:				
MAJOR COURSES: (General Education)				
ENG 101	Language and Composition I	5	0	5
ENG 110	Freshman Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 103	Report Writing	3	0	3
ENG 112	Freshman Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 102	Introduction to Psychology	3	0	3
PSY 103	General Psychology	5	0	5
PSY 203	Human Growth and Development	5	0	5
SOC 101	Introduction to Sociology	3	0	3
SOC 102	Principles of Sociology	5	0	5
POL 103	National, State, and Local Government	3	0	3
		50	0	50
The student may take 27-31 QHC from the following courses:				
RELATED COURSES:				
BIO 101	General Biology	3	4	5
BIO 102	Anatomy and Physiology I	4	2	5
BIO 104	Microbiology	3	2	4
BIO 205	Anatomy and Physiology II	4	2	5
BIO 206	Anatomy and Physiology III	4	2	5
CHM 100	Basic Chemistry	5	0	5
CHM 101	Chemistry I	3	4	5
CHM 102	Chemistry II	3	4	5
EDP 100	Selected Topics in Data Processing	0	2	1
EDP 102	Computer Literacy for Beginners	1	2	2
EDP 104	Introduction to Data Processing	3	2	4
EDP 106	BASIC Programming	2	2	3
MAT 100	Basic Math	5	0	5
MAT 105	Introduction to Algebra	5	0	5
MAT 110	Business Math	5	0	5
MAT 145	Health Occupations Math (Metrology)	3	0	3
NUR 199	Nursing Transition	1	2	2
ORI 101	College Orientation	1	0	1
		55	30	70
WORK EXPERIENCE:		0	0	0
ELECTIVES:		0	0	0
The student may take 45-50 QHC from courses listed.				
TOTAL CREDITS:				45-50
AWARD:				Certificate



GERIATRIC ASSISTANT
V-111

The Geriatric Assistant curriculum prepares graduates to provide basic health and personal care for the older persons. The curriculum emphasizes the processes of aging, communication, nutrition, therapeutic activities (music, dance, exercise, games, and arts and crafts), accident and fire safety, death and dying, drug usage, human sexuality, resources and services for the aged, and employment skills. Clinical experiences may be obtained in skilled nursing and intermediate care facilities, family care homes and homes for the aged and disabled, adult day care centers, and other long-term care settings.

Graduates may be employed in skilled nursing and intermediate care facilities, senior centers, adult day care centers, family care homes and homes for the aged and disabled, private homes, retirement homes, life-care facilities, and social services organizations which primarily serve older persons. In some clinical settings, the graduates will work under the supervision of licensed personnel.

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Clinic	Credit
MAJOR COURSES:					
GCS 1110	Introduction to Aging and Geriatric Care	5	2	0	6
GCS 1111	Geriatric Nursing Skills	4	4	0	6
GCS 1112	Geriatric Nursing Clinical	0	0	18	6
		9	6	18	18
RELATED COURSES:		0	0	0	0
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:					18
AWARD:					Certificate

INSTRUMENTATION TECHNOLOGY
T-048

The Instrumentation Technology curriculum provides a program of study to develop knowledge of measuring and controlling devices and to develop the technical skills involved in the application of instrument control to processes, systems, and operations of modern industry. The instrumentations technician is a key person in keeping a processing plant operating. This individual is responsible for both production and production control and must deal with variables that affect manufacturing processes such as temperature, flow, level, humidity, density and viscosity. In many plants when a piece of equipment breaks down, employees are laid off until the instrumentation person can repair the equipment and production is resumed. This person's knowledge of mechanics, electronics, pneumatics and the manufacturing processes is the key factor in how quickly a machine or plant may again resume operation.

The instrumentations technician may select, install, calibrate, check out and maintain sensing, telemetering, and recording instrumentation and circuitry. Other functions may include devising, setting up and operating instrumentation equipment involved in testing mechanical, structural or electrical equipment. The graduate may work as an instrumentation technician, engineering aide or associate, service specialist, laboratory technician or instrument field service technician.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
ELN 102	Introduction to Electronics	5	4	0	7
ELN 104	Circuit Analysis	5	4	0	7
ELN 106	Solid State Devices	5	4	0	7
ELN 110	Basic Troubleshooting	3	2	0	4
ELN 201	Electronic Circuits	5	4	0	7
ELN 109	Digital Logic Circuits I	3	2	0	4
ELN 203	Measurement and Control I	3	0	6	5
ELN 216	Industrial Electronics	3	2	0	4
ELN 209	Digital Logic Circuits II	3	2	0	4
ELN 213	Measurement and Control II	3	0	6	5
ELN 226	Measurement and Control III	3	0	6	5
ELN 228	Instrumentation Projects	2	0	6	4
ELN 229	Instrumentation Field Trips	0	0	3	1
MEC 235	Hydraulics and Pneumatics	3	0	3	4
		46	24	30	68
RELATED COURSES:					
DFT 101	Technical Drafting I	0	0	6	2
MAT 115	Electrical Math I	5	0	0	5
MAT 116	Electrical Math II	5	0	0	5
MAT 117	Electrical Math III	5	0	0	5
MAT 119	Mathematics of Computer Systems	3	0	0	3
PHY 101	Physics: Mechanics	3	2	0	4
PHY 102	Physics: Heat, Sound and Light	3	2	0	4
DFT 110	Blueprint Reading: Instrumentation	0	0	3	1
PHY 103	Physics: Electricity and Magnetism	3	2	0	4
ELN 205	Computer Repair	2	4	0	4
ORI 101	College Orientation	1	0	0	1
*** ***	Related Elective	3	0	0	3
		33	10	9	41
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
*** ***	Social Science Elective	5	0	0	5
		18	0	0	18
WORK EXPERIENCE:					0
RELATED ELECTIVES:					
EDP 106	BASIC Programming	2	2	0	3
BUS 269	Safety Engineering	3	2	0	4
TOTAL CREDITS:					127

AWARD: Associate of Applied Science Degree

MACHINIST
V-032

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

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

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
MEC 1101	Machine Shop Theory and Practice I	2	0	6	4
MEC 1102	Machine Shop Theory and Practice II	2	0	6	4
MEC 1103	Machine Shop Theory and Practice III	2	0	6	4
MEC 1118	Introduction to Metals	3	2	0	4
MEC 1104	Machine Shop Theory and Practice IV	2	0	6	4
MEC 1119	Applied Metallurgy	2	0	3	3
MEC 1105	Machine Shop Theory and Practice V	2	0	6	4
MEC 1106	Machine Shop Theory and Pracitce VI	2	0	6	4
MEC 1107	Machine Shop Theory and Pracitce VII	2	0	6	4
MEC 1108	Machine Shop Theory and Pracitce VIII	2	0	6	4
DFT 1104	Blueprint Reading: Machinist I	1	2	0	2
DFT 1106	Blueprint Reading: Machinist II	1	2	0	2
		23	6	51	43
RELATED COURSES:					
ORI 101	College Orientation	1	0	0	1
DFT 1105	Blueprint Reading & Sketching	1	2	0	2
ISC 1101	Industrial Safetey	3	2	0	4
MAT 1122	Machinist Mathematics I	3	0	0	3
MAT 1123	Machinist Mathematics II	3	0	0	3
MAT 1124	Machinist Mathematics III	3	0	0	3
WLD 1101	Basic Welding	1	3	0	2
***	*** Related Elective	4	0	0	4
		19	7	0	22
GENERAL EDUCATION:					
ENG 1111	Reading Comprehension	2	0	0	2
PHY 1101	Applied Science I	3	2	0	4
PSY 109	Human Relations	3	0	0	3
		8	2	0	9
WORK EXPERIENCE:					0
RELATED ELECTIVES:					
BUS 237	Small Business Management	3	2	0	4
ELC 1110	Basic Electricity	1	3	0	2
PHY 1102	Applied Science II	3	2	0	4
MAT 1113	Estimating: Mechanical	4	0	0	4
TOTAL CREDITS:					74
AWARD:					Diploma

MASONRY
V-070

The Masonry curriculum prepares individuals to work in the construction industry as bricklayers and masons. The mason must have a knowledge of basic mathematics, blueprint reading, and must also know the methods used in laying out a masonry job for residential, commercial and industrial construction.

Masons are employed by contractors in the building construction field to lay brick and blocks made of tile, concrete, glass, gypsum or terra cotta. The mason is also capable of constructing or repairing walls, partitions, arches, sewers, furnaces and other masonry structures.



COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
MAS 1000	Masonry Shop I	5	0	15	10
MAS 1001	Masonry Shop II	5	0	15	10
MAS 1020	Related Trowel Trades	5	0	15	10
MAS 1005	Rock Construction	5	0	15	10
		20	0	60	40
RELATED COURSES:					
BUS 237	Small Business Management	3	2	0	4
DFT 1110	Blueprint Reading: Building Trades	1	0	3	2
MAT 1112	Mathematics: Building Trades	2	0	0	2
ELC 1110	Basic Electricity	1	0	3	2
DFT 1131	Drafting: Building Trades	1	0	3	2
DFT 1135	Design Techniques (CAD)	3	2	0	4
MAT 1109	Estimating: Building Trades	4	0	0	4
CIV 1120	Building Trades Instruments	1	0	3	2
CAR 1012	Computers in Construction	1	0	3	2
ORI 101	College Orientation	1	0	0	1
		18	4	15	25
GENERAL EDUCATION:					
ENG 1111	Reading Comprehension	2	0	0	2
ENG 1112	Communication Skills	2	0	0	2
PSY 109	Human Relations	3	0	0	3
		7	0	0	7
TOTAL CREDITS:					72
AWARD:					Diploma

CURRICULUM BY QUARTERS

		HOURS Class	Lab	Shop	Credit
FIRST QUARTER					
MAS 1000	Masonry Shop I	5	0	15	10
DFT 1110	Blueprint Reading: Building Trades	1	0	3	2
ELC 1110	Basic Electricity	1	0	3	2
ORI 101	College Orientation	1	0	0	1
MAT 1112	Mathematics: Building Trades	2	0	0	2
		10	0	21	17
SECOND QUARTER					
MAS 1001	Masonry Shop II	5	0	15	10
DFT 1131	Drafting: Building Trades	1	0	3	2
ENG 1111	Reading Comprehension	2	0	0	2
BUS 237	Small Business Management	3	2	0	4
		11	2	18	18
THIRD QUARTER					
MAS 1020	Related Trowel Trades	5	0	15	10
DFT 1135	Design Techniques (CAD)	3	2	0	4
ENG 1112	Communication Skills	2	0	0	2
MAT 1109	Estimating: Building Trades	4	0	0	4
		14	2	15	20
FOURTH QUARTER					
MAS 1005	Rock Construction	5	0	15	10
CIV 1120	Building Trades Instruments	1	0	3	2
CAR 1012	Computers in Construction	1	0	3	2
PSY 109	Human Relations	3	0	0	3
		10	0	21	17

MEDICAL LABORATORY TECHNOLOGY
T-110

The Medical Laboratory Technology curriculum prepares graduates to perform clinical laboratory procedures in chemistry, hematology, bacteriology, parasitology, serology, blood banking and body fluid analysis to develop data that may be used in the diagnosis of diseases and in evaluating the effectiveness of treatments.

The medical laboratory technician works under the supervision of a medical technologist and may be employed as a staff technician or assistant supervisor in a medical laboratory, or clinical instructor in an educational institution.

The graduate is eligible to take the registry examination given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists for certification as a medical laboratory technician or the examination given by the National Certifying Agency as a clinical laboratory technician.

Individuals desiring a career in medical laboratory technology should if possible take algebra, biology and chemistry courses prior to entering the program.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
MLT 101	Pathophysiology	4	2	5
MLT 102	Clinical Hematology I	3	4	5
MLT 103	Clinical Microbiology	4	2	5
MLT 104	Clinical Chemistry	4	2	5
MLT 105	Clinical Immunology and Serology	3	0	3
MLT 106	Parasitology and Mycology	1	2	2
MLT 112	Clinical Hematology II	4	2	5
MLT 122	Clinical Microscopy	4	2	5
MLT 123	Immunohematology	3	4	5
MLT 129	Instrumentation	3	0	3
MLT 130	Clinical Practicum A	0	36	12
MLT 131	Clinical Practicum B	0	36	12
MLT 132	Orientation and Evaluation	3	0	3
MLT 133	Seminar	3	0	3
MLT 135	Special Topics	3	0	3
		42	92	76
RELATED COURSES:				
BIO 102	Anatomy and Physiology I	4	2	5
BIO 104	Microbiology	3	2	4
CHM 101	Chemistry I	3	4	5
CHM 102	Chemistry II	3	4	5
EDP 102	Computer Literacy for Beginners	1	2	2
ORI 101	College Orientation	1	0	1
MAT 105	Introduction to Algebra	5	0	5
		20	14	27
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 103	General Psychology	5	0	5
		18	0	18
ELECTIVES:		0	0	0
TOTAL CREDITS:				121

AWARD: Associate of Applied Science Degree

Admissions Procedures:

a. Complete SCC application for admissions.
b. Request transcripts (records) from previous schooling be sent directly to SCC Admissions Office.
c. Take SCC Allied Health admission test or send SAT scores. (400 math, 400 verbal may be used in lieu of admission test.)

NURSING EDUCATION OPTIONS
T-116

The Nursing Education Options: Associate Degree with Practical Nursing is a unique nursing curriculum designed to prepare graduates to practice as a practical nurse (LPN) or a registered nurse (RN). Students who choose to exit after the first four quarters have received fundamental preparation in nursing enabling them to be eligible to take the National Council Licensure Examination for Licensed Practical Nurses (NCLEX-PN) required for practice as a Licensed Practical Nurse. Graduates of the second year have developed the knowledge and skills which will enable them to be eligible to take the National Council Licensure Examination for Licensed Registered Nurses (NCLEX-RN) required to practice as a Registered Nurse. Licensed Practical Nurses who meet specific criteria may also enter this program with advanced credits toward the Associate of Applied Science Degree.

The first year graduate possesses a sound basic knowledge of nursing theory and proficiency in fundamental nursing skills. The graduate may provide care and treatment to selected patients under the supervision of a registered nurse or physician. The practical nurse graduate is prepared specifically to participate in assessing the patient's physical and mental health; to record and report the results of the nursing assessment; to participate in implementing the health care plan; to reinforce the teaching and counseling of a registered nurse, physician, or dentist; and to record and report the nursing care rendered and the patient's response to that care.

The graduate of the second year is prepared to carry out nursing measures as well as medical delegated procedures utilizing the principles and theories of nursing and the sciences. The associate degree graduate is prepared to: to assess the patient's physical and mental health; to record and report the results of the nursing assessment; to plan, initiate and deliver and evaluate appropriate nursing acts; to teach, delegate to or supervise other personnel in implementing the treatment regimen; to collaborate with other health care providers in determining the appropriate health care for a patient; to implement the treatment and pharmaceutical regimen prescribed by any person authorized by State law to prescribe such a regimen; to provide teaching and counseling about the patient's health care; to report and record the plan for care, nursing care given, and the patient's response to that care; and to supervise, teach and evaluate those who perform or are preparing to perform nursing functions.

COURSE AND HOUR REQUIREMENTS		HOURS			
	Title	**Class**	**Lab**	**Clinic**	**Credit**
MAJOR COURSES:					
NUR 101	Fundamentals of Nursing	6	4	3	9
NUR 102	Medical-Surgical Nursing I	6	0	12	10
NUR 103	Medical-Surgical Nursing II	6	0	15	11
NUR 104	Maternal-Child Health Nursing	6	0	15	11
NUR 107	Pharmacology	3	0	0	3
NUR 108	Nursing Seminar I	2	0	0	2
or NUR 199	Nursing Transition 1-2-0-2				
NUR 202	Medical-Surgical Nursing III	5	0	15	10
NUR 203	Medical-Surgical Nursing IV	5	0	15	10
NUR 204	Advanced Maternal-Child Health Nursing	6	0	15	11
NUR 205	Psychiatric Nursing	5	0	15	10
NUR 206	Nursing Seminar II	2	0	0	2
		52	4	105	89
RELATED COURSES:					
BIO 102	Anatomy and Physiology I	4	2	0	5
BIO 104	Microbiology	3	2	0	4

BIO 205	Anatomy and Physiology II	4	2	0	5
BIO 206	Anatomy and Physiology III	4	2	0	5
MAT 145	Metrology (Health Occupations Math)	3	0	0	3
NUT 101	Nutrition and Diet Therapy	3	0	0	3
		21	8	0	25
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
PSY 103	General Psychology	5	0	0	5
SOC 101	Introduction to Sociology	3	0	0	3
		21	0	0	21
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:		135			

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
First Year					
FIRST QUARTER (Fall)					
NUR 101	Fundamentals of Nursing	6	4	3	9
BIO 102	Anatomy and Physiology I	4	2	0	5
NUT 101	Nutrition and Diet Therapy	3	0	0	3
PSY 103	General Psychology	5	0	0	5
		18	6	3	22
SECOND QUARTER (Winter)					
NUR 102	Medical-Surgical Nursing I	6	0	12	10
MAT 145	Health Occupations Math (Metrology)	3	0	0	3
		9	0	12	13
THIRD QUARTER (Spring)					
NUR 103	Medical-Surgical Nursing II	6	0	15	11
NUR 107	Pharmacology	3	0	0	3
ENG 101	Language and Composition I	5	0	0	5
		14	0	15	19
FOURTH QUARTER (Summer)					
NUR 104	Maternal-Child Health Nursing	6	0	15	11
BIO 104	Microbiology	3	2	0	4
NUR 108	Nursing Seminar I	2	0	0	2
EDP 102	Computer Literacy	1	2	0	2
		12	4	15	19

Second Year

**FIFTH QUARTER (Winter)*					
NUR 204	Advanced Maternal-Child Health Nursing	6	0	15	11
	OR				
NUR 205	Psychiatric Nursing	5	0	15	10
	AND				
SOC 101	Introduction to Sociology	3	0	0	3
BIO 205	Anatomy and Physiology II	4	2	0	5
		13	2	15	19
	OR	12	2	15	18
SIXTH QUARTER (Spring)					
NUR 202	Medical-Surgical Nursing III	5	0	15	10
BIO 206	Anatomy and Physiology III	4	2	0	5
		9	2	15	15

**SEVENTH QUARTER (Summer)*

NUR 204	Advanced Maternal-Child Health Nursing		6	0	15	11
	OR					
NUR 205	Psychiatric Nursing		5	0	15	10
	AND					
ENG 102	Language and Composition II		5	0	0	5
			11	0	15	16
		OR	10	0	15	15

EIGHTH QUARTER (Fall)

NUR 203	Medical-Surgical Nursing IV	5	0	15	10
ENG 204	Oral Communications	3	0	0	3
NUR 206	Nursing Seminar II	2	0	0	2
		10	0	15	15

Course assignments will be made by the Program Director or his/her designee.

Admissions Procedures:

First Year Applicants

Region A Nursing Consortium offers quarter one through four (NEO I) at each of the three consortium-member colleges: Southwestern Community College, Haywood Community College, and Tri-County Community College. The nursing courses in quarter five through eight (NEO II) are conducted at the administrative Unit, Haywood Community College, with clinical rotations scheduled primarily in the Asheville area. Non-nursing courses are taken at the school of enrollment unless otherwise arranged. All students completing the eighth quarter are awarded an Associate Degree in Nursing from the home school and are eligible to take the NCLEX-RN for Registered Nurse Licensure.

While students who complete NEO I may choose to transfer to other NEO programs throughout the state on a space-available basis to complete NEO II, such transfer will be at the discretion of the receiving institution. Students from otehr NEO programs may transfer into the region A Nursing consortium program also on a space available basis, provided they can satisfy all other admission requirements.

It should be noted that many of the courses are sequential; therefore, it is not advisable for the student to omit any quarter and re-enter the program that year. Re-entry under such circumstances is by permission of the program director.

Admissions Requirements and Procedures for First Year Applicants:

Phase I:

a. Complete the application for admission to the desired college.
b. Submit official copies of transcripts or records of high school and/or acceptable GED scores and all post secondary schools.
   1. Letter grades of "C" or higher on each: high school or college level algebra, biology, chemistry. (Applicants currently enrolled in these classes will be given conditional credit.)
c. Satisfactory scores on the college Allied Health Admissions Test.
   1. A 90-day waiting period is required before retesting.
   2. SAT scores or 400 on Verbal and 400 on Math will be acceptable in lieu of the college admissions test.
d. Two acceptable recommendations.

Note: Acceptance may be made at this point on a first come, first served basis. Preference will be given to residents of the primary service area of each school until June 15, to residents of North Carolina until July 15, after which admissions is open to any qualified applicant.

Phase II: (Must be dated within 90 days of enrollment)

a. Submit the college's physical examination report completed by a physician.
b. Submit the college's dental and immunization report completed by health clinic personnel, dentist or physician.
c. Attend individual interviews with NEO Instructors. (Applicants will be notified of dates and time by the Admissions Office.)

Note: (1) Failure to complete all steps in Phase I or II my result in forfeiting position in the program.
(2) Applicants are responsible for submitting all necessary records to the respective college.
(3) Applications must be updated annually by applicants who were not accepted the previous year.

Note: Following admission, evaluation of health and overall behavior of the student continues through the program. Dismissal from the program will result if a student: (1) presents problems in physical or emotional health which do not respond to appropriate treatment and/or counseling within a reasonable period of time, or (2) demonstrates behavior which conflicts with safety essential to nursing practice.

Second Year Applicants:

Phase I:

a. Meet the admissions requirements for first year applicants.
b. Have a grade point average of 2.00 or above in PNE or First Year NEO Program.
c. Complete the following courses with a grade of "C" or above:
General Psychology, English, Microbiology, Nursing Transitions.

Phase II: (Must be dated within 90 days of enrollment)

a. Submit physical examination report completed by a physician.
b. Submit dental and immunization report completed by dentist, health clinic personnel, or physician.
c. Attend individual interviews with NEO Instructors. (Applicants will be notified of dates and time by the Admissions Office).

Note: (1) Failure to complete all steps in Phase I or II may result in forfeiting position in the program.
(2) Applicants are responsible for submitting all necessary records to the respective college.
(3) Applications must be updated annually by applicants.

Note: Following admission, evaluation of health and overall behavior of the student continues through the program. Dismissal from the program will result if a student: (1) presents problems in physical or emotional health which do not respond to appropriate treatment and/or counseling within a reasonable period of time, or (2) demonstrates behavior which conflicts with safety essential to nursing practice.

Application Process for NEO II Advanced Placement Candidates:

a. Prospective nursing candidates who are North Carolina residents residing in the seven most western counties of North Carolina should apply to their respective institutions. For example: students from Cherokee, Clay, and Graham counties should apply only to Tri-County; students from Macon, Swain, and Jackson counties to Southwestern Community College; and Haywood county residents to Haywood Community College. This same rule applies to non-residents currently living in North Carolina but who have not yet met the required twelve month waiting period for North Carolina residency.
b. For the convenience of the candidates, any North Carolina resident who is not living in one of the above mentioned

counties will apply only to Haywood Community College, any resident of Georgia (except Raburn county) or Tennessee will apply only to Tri-County Community College, and any other non-resident will apply only to Southwestern Community College.

c. North Carolina residents from the seven most western counties will be given first priority for admission to their local institutions. If there is a surplus of these candidates at any one school, these candidates will be divided as equally as possible between the other schools. The other candidates (non-residents and residents outside the consortium service area) will be maintained in a pool to be divided as equally as possible between the other schools. If there is a surplus of qualified candidates, the consortium point system will be applied, giving preference to North Carolina residents.
d. The surplus candidates will be divided as equally as possible by a committee called the NEO Admission Committee composed of the Director of Admissions at each school plus the Program Director of the NEO program or her designate.
e. The NEO Admissions Committee will meet in the latter part of October or the first part of November or as often as needed at a convenient site and time to divide the candidates.
f. Although the candidates can only apply to one designated school, they may be tested at the school or schools of their choice provided they observe the 90-day waiting period. They should also complete the NEO Entrance Examination Application at every testing occasion.

Progression Policies:

These Progression Policies will apply to all students in Region A Nursing Consortium, first and second year (NEO I and NEO II).

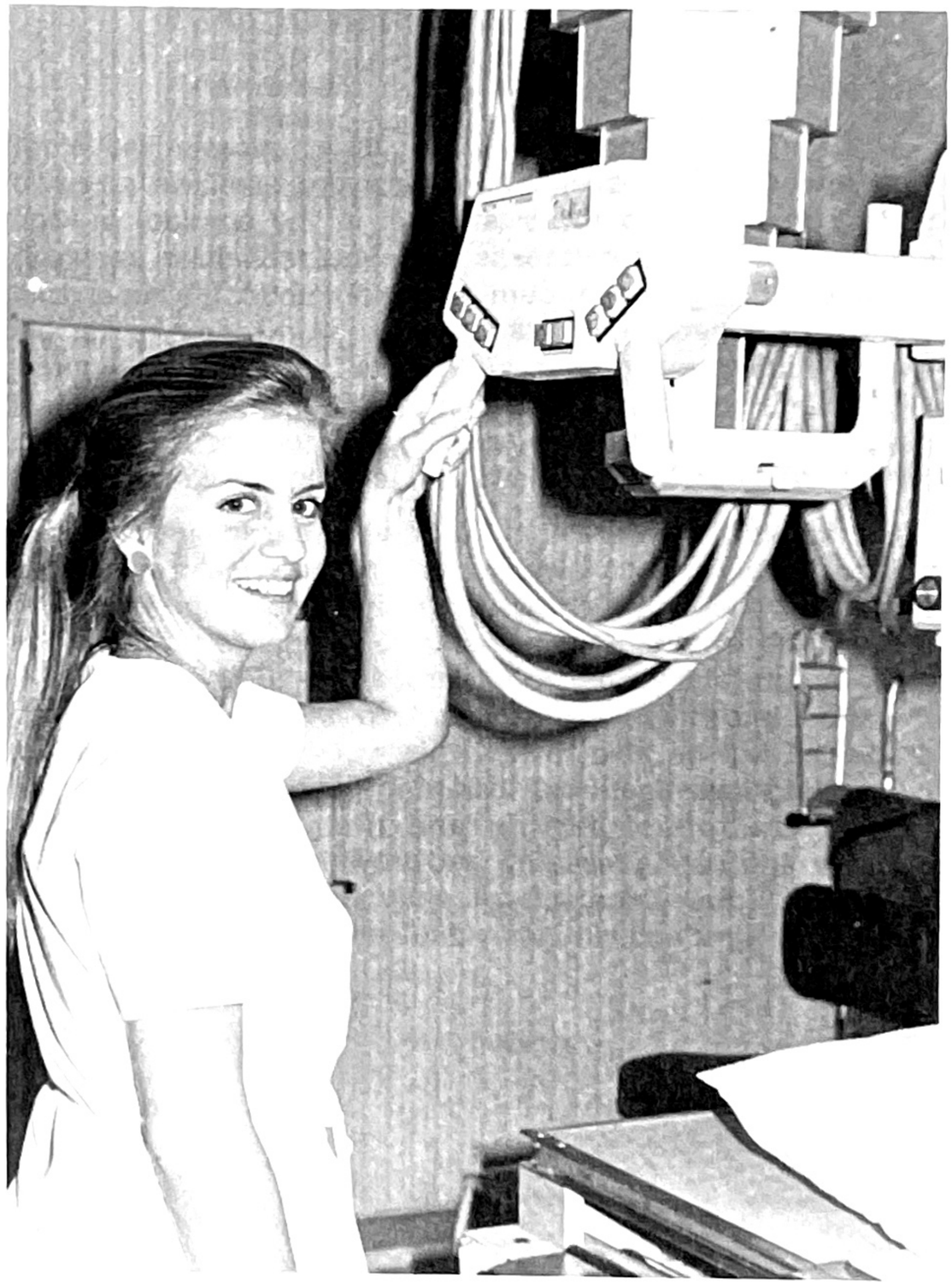
a. The grading policies of the Nursing Education Options program are in the catalogs of the home colleges for the first year and in the catalog of the administrative college (HCC) for the second year.
b. To remain in good standing, all students in the program are required to maintain a cumulative grade point average of "C" (2.0 quality points).
c. A student receiving a grade below "C" in any NUR prefix course will not be permitted to progress in the nursing core until the course has been successfully completed with a grade of "C" or better.
   1. The student may continue to take non-nursing courses in the NEO curriculum according to established eligibility.
d. In order to successfully complete any nursing course with a clinical component, the student must:
   1. Earn a grade of "C" or better in the theoretical (classroom) component, and;
   2. Earn a grade of "C" or better in the clinical component as well as in any graded lab component;
   3. Students earning a grade of "C" or better in all components of the course will have these grades averaged according to the approved ratio to determine the final grade of record;
   4. Students earning a grade below "C" in either/any component of the course, including those with more than two components, will have the lower grade reported as the final grade of record. There will be no averaging of the grades. The student will be required to repeat the entire course, all components.

Note: Due to limited class size and clinical availability, students who must repeat will be enrolled in the course needed on a space-available basis at the first opportunity. In the event that more students must repeat than space is available, priority will be given to those who have the highest

numerical average below "C" in the course under consideration.

e. First year students who do not wish to progress into the second year are to notify their first year coordinator in writing by the middle of the fourth quarter.

Note: Following admission, evaluation of health and overall behavior of the student continues through the program. Dismissal from the program will result if a student: (1) presents problems in physical or emotional health which do not respond to appropriate treatment and/or counseling within a reasonable period of time, or (2) demonstrates behavior which conflicts with safety essential to nursing practice.



PARALEGAL TECHNOLOGY
T-120

The Paralegal Technology curriculum trains individuals to work under the general direction of lawyers, to relieve lawyers of routine matters, and to assist them in the conduct of more complicated and difficult tasks. The legal technician should be capable of doing independent legal work under the supervision of a lawyer, supervise secretaries in their work for the lawyer, and search out information and court facts for the lawyer. Training will include general subjects such as English, accounting and psychology, as well as specialized legal courses such as legal definitions, court systems, laws and techniques of investigation.

Graduates of the Paralegal Technology curriculum should be able to directly assist a lawyer or group of lawyers in most facets of law, but they must always work under the supervision of a lawyer. The legal technician will not be qualified to give legal advice, enter into courtroom procedure, or be involved in litigation except as an assistant to the lawyer. Paralegal graduates will be able to assist in work on probate matters, conducting investigations, searching public records, preparation of tax forms, serving and filing legal documents, bookkeeping, library research, and providing office management assistance. Employment opportunities are available in public and private law firms and with individual lawyers.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
LEX 100	Paralegal Orientation	3	0	3
LEX 106	Constitutional Law	5	0	5
LEX 110	Civil Procedure	3	0	3
LEX 103	Legal Research I	3	2	4
LEX 113	Family Law	3	4	5
LEX 114	Paralegal Seminar	3	0	3
LEX 111	Torts	3	0	3
LEX 212	Real Property	3	2	4
LEX 220	Legal Research II	3	2	4
LEX 208	Criminal Law	5	0	5
LEX 201	N.C. Legal Systems	5	0	5
LEX 107	Criminal Evidence and Procedure	4	3	5
LEX 211	Title Abstracting	2	2	3
LEX 203	Administrative Law	3	0	3
LEX 215	The Law Office	2	2	3
LEX 225	Litigation Preparation	2	2	3
LEX 232	Estate Administration	3	0	3
LEX 210	Mechanics of Property Transactions	3	0	3
		58	19	67
RELATED COURSES:				
MAT 110	Business Math	5	0	5
BUS 115	Business Law	5	0	5
BUS 120	Accounting I	4	3	5
BUS 102	Typing I	2	3	3
BUS 202	Word Processing Systems I	1	4	3
ORI 101	College Orientation	1	0	1
EDP 104	Introduction to Data Processing	3	2	4
		21	12	26
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
*** ***	Social Science Elective	5	0	5
		18	0	18

WORK EXPERIENCE:

COE 102	Cooperative Work Experience*	0	20	2

ELECTIVES:

		5	0	5

RECOMMENDED ELECTIVES:

COE 101	Cooperative Work Experience	0	10	1
COE 103	Cooperative Work Experience	0	30	3

TOTAL CREDITS 118

*An additional four hours of co-op may be substituted for any free elective.

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
LEX 100	Paralegal Orientation	3	0	3
MAT 110	Business Math	5	0	5
BUS 115	Business Law	5	0	5
ORI 101	College Orientation	1	0	1
		19	0	19
SECOND QUARTER				
BUS 120	Accounting I	4	3	5
ENG 102	Language and Composition II	5	0	5
LEX 103	Legal Research I	3	2	4
LEX 106	Constitutional Law	5	0	5
BUS 102	Typing	2	3	3
		19	8	22
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
LEX 220	Legal Research II	3	2	4
LEX 211	Title Abstracting	2	2	3
LEX 212	Real Property	3	2	4
***	*** Social Science Elective	5	0	5
		16	6	19
FOURTH QUARTER				
LEX 225	Litigation Preparation	2	2	3
LEX 232	Estate Administration	3	0	3
LEX 201	N.C. Legal Systems	5	0	5
LEX 210	Mechanics of Property Transactions	3	0	3
***	*** Elective	5	0	5
		18	2	19
FIFTH QUARTER				
LEX 111	Torts	3	0	3
LEX 113	Family Law	3	4	5
LEX 208	Criminal Law	5	0	5
BUS 202	Word Processing Systems I	1	4	3
		12	8	16
SIXTH QUARTER				
LEX 107	Criminal Evidence and Procedure	4	3	5
LEX 110	Civil Procedure	3	0	3
LEX 203	Administrative Law	3	0	3
LEX 215	The Law Office	2	2	3
EDP 104	Introduction to Data Processing	3	2	4
		15	7	18
SEVENTH QUARTER				
COE 102	Cooperative Work Experience	0	20	2
LEX 114	Paralegal Seminar	3	0	3
		3	20	5

PLUMBING AND PIPEFITTING
(Day Program)
V-037

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

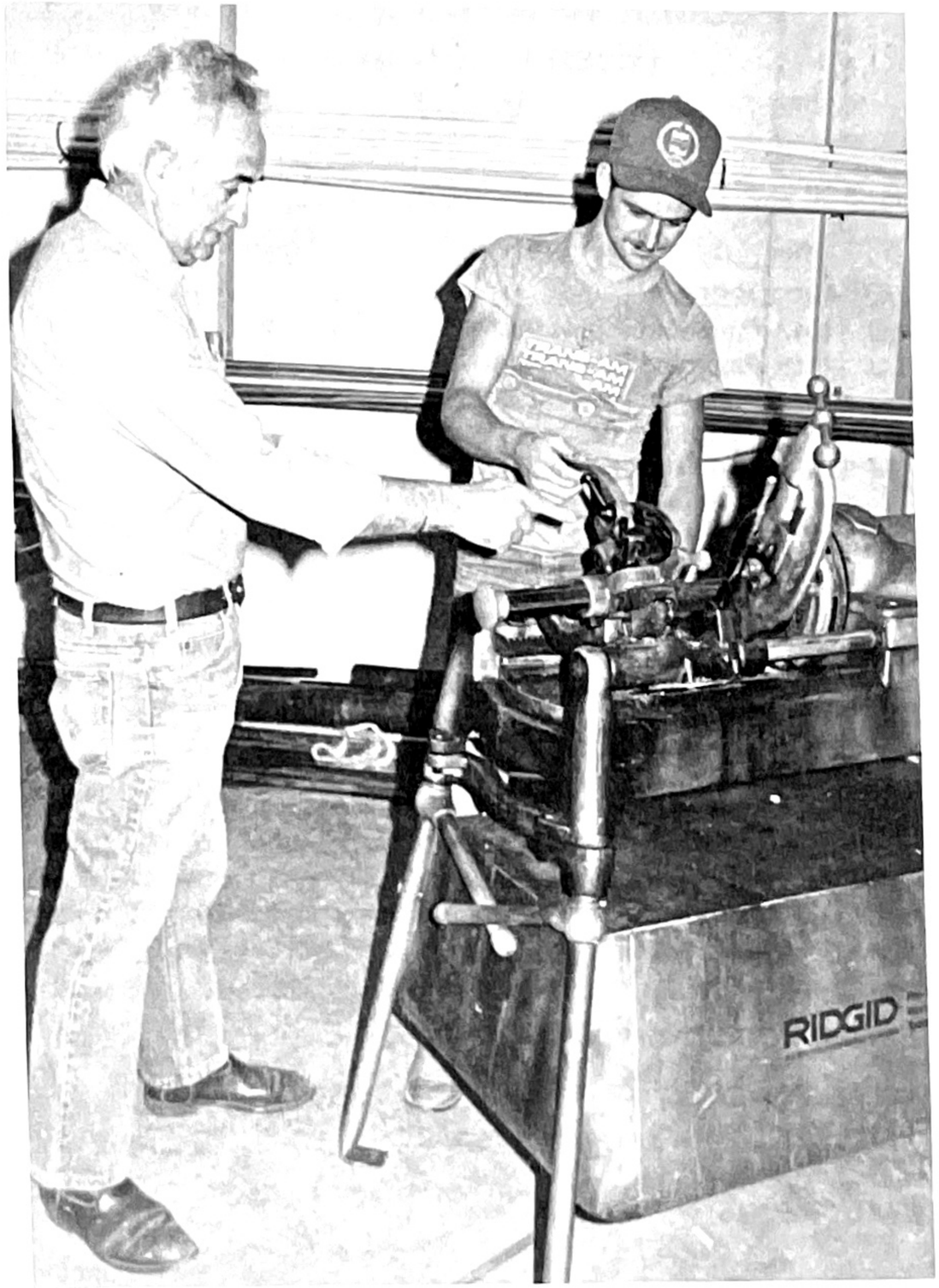
Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air or other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures,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

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Shop	Credit
MAJOR COURSES:					
PLU 1101	Plumbing Pipework	5	0	15	10
PLU 1111	Domestic Hot and Cold Water Systems	5	0	15	10
PLU 1112	Installation of Plumbing Fixtures	2	0	6	4
PLU 1115	Drainage Systems: Residential	4	0	12	8
PLU 1116	Commercial Systems	5	0	15	10
		21	0	63	42
RELATED COURSES:					
DFT 1110	Blueprint Reading: Building Trades	1	3	0	2
MAT 1112	Mathematics: Building Trades	2	0	0	2
DFT 1115	Blueprint Reading: Plumbing Trades	3	0	0	3
DFT 1122	Blueprint Reading and Sketching: Mechanical	1	3	0	2
MAT 1114	Math for Pipefittera and Plumbers	4	0	0	4
MAT 1105	Estimating: Plumbing Trades	3	0	0	3
WLD 1101	Basic Welding	1	3	0	2
ELC 1110	Basic Electricity	1	3	0	2
ORI 101	College Orientation	1	0	0	1
		17	12	0	21
GENERAL EDUCATION:					
ENG 1106	Fundamentals of English	3	0	0	3
PSY 109	Human Relations	3	0	0	3
		6	0	0	6
WORK EXPERIENCE:					0
ELECTIVES:					0
TOTAL CREDITS:					69
AWARD:					Diploma

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
PLU 1101	Plumbing Pipework	5	0	15	10
DFT 1110	Blueprint Reading: Building Trades	1	3	0	2
MAT 1112	Mathematics: Building Trades	2	0	0	2
ORI 101	College Orientation	1	0	0	1
ELC 1110	Basic Electricity	1	3	0	2
		9	6	15	17
SECOND QUARTER					
PLU 1111	Domestic Hot and Cold Water Systems	5	0	15	10
DFT 1115	Blueprint Reading: Plumbing Trades	3	0	0	3
DFT 1122	Blueprint Reading and Sketching: Mechanical	1	3	0	2
		10	0	21	15
THIRD QUARTER					
PLU 1115	Drainage Systems: Residential	4	0	12	8
PLU 1112	Installation of Plumbing Fixtures	2	0	6	4
MAT 1114	Math for Pipefitters and Plumbers	4	0	0	4
ENG 1106	Fundamentals of English	3	0	0	3
		13	0	18	19
FOURTH QUARTER					
PLU 1116	Commercial Systems	5	0	15	10
MAT 1105	Estimating: Plumbing Trades	3	0	0	3
PSY 109	Human Relations	3	0	0	3
WLD 1101	Basic Welding	1	3	0	2
		12	3	15	18



PLUMBING AND PIPEFITTING
(Evening Program)
V-037

COURSE AND HOUR REQUIREMENTS

Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:				
PLU 1101A Plumbing Pipework I	2	0	6	4
PLU 1101B Plumbing Pipework II	3	0	9	6
PLU 1111A Domestic Hot and Cold Water Systems I	2	0	6	4
PLU 1111B Domestic Hot and Cold Water Systems II	3	0	9	6
PLU 1115A Drainage Systems: Residential	2	0	6	4
PLU 1112 Installation of Plumbing Fixtures	2	0	6	4
PLU 1116A Commercial Systems	1	0	3	2
	15	0	45	30
RELATED COURSES:				
DFT 1110 Blueprint Reading: Building Trades	1	0	3	2
DFT 1115 Blueprint Reading: Plumbing Trades	3	0	0	3
MAT 1105 Estimating: Plumbing Trades	3	0	0	3
MAT 1114 Math for Pipefitters and Plumbers	4	0	0	4
WLD 1101 Basic Welding	1	0	3	2
	12	0	6	14
GENERAL EDUCATION:				0
WORK EXPERIENCE:				0
ELECTIVES:				0
TOTAL CREDITS:				44
AWARD:				Certificate

CURRICULUM BY QUARTERS

	HOURS Class	Lab	Shop	Credit
FIRST QUARTER				
DFT 1110 Blueprint Reading: Building Trades	1	0	3	2
PLU 1101A Plumbing Pipework I	2	0	6	4
	3	3	6	6
SECOND QUARTER				
PLU 1101B Plumbing Pipework II	3	0	9	6
DFT 1115 Blueprint Reading: Plumbing Trades	3	0	0	3
	6	0	9	9
THIRD QUARTER				
PLU 1111A Domestic Hot and Cold Water Systems I	2	0	6	4
MAT 1114 Math for Pipefitters and Plumbers	4	0	0	4
	6	0	6	8
FOURTH QUARTER				
PLU 1111B Domestic Hot and Cold Water Systems II	3	0	9	6
WLD 1101 Basic Welding	1	0	3	2
	4	0	12	8
FIFTH QUARTER				
PLU 1115A Drainage Systems: Residential	2	0	6	4
SIXTH QUARTER				
PLU 1112 Installation of Plumbing Fixtures	2	0	6	4
MAT 1105 Estimating: Plumbing Trades	3	0	0	3
	5	0	6	7
SEVENTH QUARTER				
PLU 1116A Commercial Systems	1	0	3	2

RADIO AND TV BROADCASTING TECHNOLOGY
T-179

Students enrolled in the Radio and TV Broadcasting Technology curriculum have a variety of careers from which to choose. They learn to speak well on microphone and on camera with and without scripts. They learn how to operate the camera, run the audio control board and direct the whole program. Courses in the curriculum also teach students the legal aspects of broadcasting, how to manage a broadcast operation, how to troubleshoot equipment, and how to write and produce both audio and video programming. Technical courses included are designed to give students an understanding of electronics and broadcast equipment.

Upon completion they are well prepared to write, produce, perform and direct production. They can also function as technicians and have an understanding of how their equipment works.

Graduates of the curriculum may find employment in radio or television stations, cable TV companies, public relations and advertising agencies, recording studios, production houses, and industrial or educational media.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
RTV 201	Introduction to Broadcasting	5	2	6
RTV 203	Expression in the Media	5	0	5
RTV 204	Radio Production	2	6	5
RTV 206	Writing for Broadcasting	3	0	3
RTV 116	Broadcasting Announcing	3	2	4
RTV 207	Television Production I	2	10	7
RTV 120	Control Room Procedures	3	2	4
RTV 209	Television Production II	2	10	7
RTV 205	Broadcast Programming	3	0	3
RTV 218	Broadcast Law	3	0	3
RTV 211	Broadcast Journalism	5	4	7
RTV 202	Sales and Promotion	3	0	3
RTV 221	Troubleshooting Broadcast Equipment	3	2	4
RTV 212	Broadcast Management	3	0	3
ELC 109	Fundamentals of AC and DC	3	2	4
RTV 243	Public Relations and the Media	5	0	5
***	Technical Elective	3	0	3
		56	40	76
RELATED COURSES:				
MAT 105	Introduction to Algebra	5	0	5
MAT 111	Applied Trigonometry	5	0	5
BUS 102	Typing I	2	3	3
ORI 101	College Orientation	1	0	1
EDP 115	Computer Graphics	3	2	4
***	Computer Elective	3	0	3
		19	5	21
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
SOC 102	Principles of Sociology	5	0	5
***	General Education Elective	4	0	4
		22	0	22
WORK EXPERIENCE:				
RTV 227	Broadcast Field Training	0	40	4
	OR			
RTV 229	Special Projects	0	18	6

TECHNICAL ELECTIVES:

RTV 213	Station Operations I	0	10	3
RTV 214	Station Operations II	0	10	3
RTV 215	Station Management I	0	4	1
RTV 216	Station Management II	0	4	1
RTV 220	Introduction to Television Systems	5	4	7

TOTAL CREDITS: 123

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
BUS 102	Typing I	2	3	3
RTV 201	Introduction to Broadcasting	5	2	6
RTV 203	Expression in the Media	5	0	5
ORI 101	College Orientation	1	0	1
		18	5	20
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
RTV 204	Radio Production	2	6	5
RTV 206	Writing for Broadcasting	3	0	3
MAT 105	Introduction to Algebra	5	0	5
		15	6	18
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
MAT 111	Applied Trigonometry	5	0	5
RTV 116	Broadcasting Announcing	3	2	4
RTV 207	Television Production I	2	10	7
		13	12	19
FOURTH QUARTER				
ELC 109	Fundamentals of AC and DC	3	2	4
RTV 120	Control Room Procedures	3	2	4
RTV 209	Television Production II	2	10	7
RTV 205	Broadcast Programming	3	0	3
***	*** Technical Elective	3	0	3
		14	14	21
FIFTH QUARTER				
RTV 218	Broadcast Law	3	0	3
RTV 211	Broadcast Journalism	5	4	7
RTV 202	Sales and Promotion	3	0	3
SOC 102	Principles of Sociology	5	0	5
***	*** Computer Elective	3	0	3
		19	4	21
SIXTH QUARTER				
RTV 243	Public Relations and the Media	5	0	5
RTV 221	Troubleshooting Broadcast Equipment	3	2	4
RTV 212	Broadcast Management	3	0	3
EDP 115	Computer Graphics	3	2	4
***	*** General Education Elective	4	0	4
		18	4	20
SEVENTH QUARTER				
RTV 227	Broadcast Field Training	0	40	4
	OR			
RTV 229	Special Projects	0	18	6

RADIOLOGIC TECHNOLOGY
T-061

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

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

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

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

COURSE AND HOUR REQUIREMENTS

Title		HOURS Class	Lab	Clinic	Credit
MAJOR COURSES:					
RDT 105	Patient Care/Medical Ethics	3	0	0	3
RDT 107	Positioning I	3	4	0	5
RDT 108	Positioning II	3	4	0	5
RDT 109	Positioning III	3	4	0	5
RDT 110	Radiation Protection/Biology	3	0	0	3
RDT 111	Clinical Education I	0	0	15	5
RDT 112	Clinical Education II	0	0	15	5
RDT 113	Clinical Education III	0	0	24	8
RDT 115	Introduction to Radiologic Technology	2	0	0	2
RDT 116	Principles of Exposure I	3	0	0	3
RDT 117	Principles of Exposure II	3	2	0	4
RDT 201	Radiologic Physics I	3	0	0	3
RDT 202	Radiologic Physics II	3	0	0	3
RDT 203	Film Critique	3	0	0	3
RDT 205	Special Procedures I	3	0	0	3
RDT 206	Special Procedures II	3	0	0	3
RDT 210	Introduction to the Study of Disease	3	0	0	3
RDT 215	Clinical Education IV	0	0	24	8
RDT 216	Clinical Education V	0	0	24	8
RDT 217	Clinical Education VI	0	0	24	8
RDT 218	Clinical Education VII	0	0	36	12
RDT 237	Radiologic Technology Project	4	0	0	4
RDT 238	Radiologic Technology Seminar	3	0	0	3
		48	14	162	109
RELATED COURSES:					
BIO 102	Anatomy and Physiology I	4	2	0	5
BIO 205	Anatomy and Physiology II	4	2	0	5
BIO 206	Anatomy and Physiology III	4	2	0	5
ORI 101	College Orientation	1	0	0	1
EDP 102	Computer Literacy for Beginners	1	2	0	2
MAT 105	Introduction to Algebra	5	0	0	5
MLT 110	Medical Terminology	3	0	0	3
		22	8	0	26

GENERAL EDUCATION:					
ENG 103	Report Writing	3	0	0	3
ENG 110	Freshman Composition I	5	0	0	5
ENG 112	Freshman Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
PSY 102	Introduction to Psychology	3	0	0	3
		19	0	0	19
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:					154

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS			
		Class	Lab	Clinic	Credit
FIRST QUARTER					
BIO 102	Anatomy and Physiology I	4	2	0	5
ENG 110	Freshman Composition I	5	0	0	5
MAT 105	Introduction to Algebra	5	0	0	5
MLT 110	Medical Terminology	3	0	0	3
RDT 115	Introduction to Radiologic Technology	2	0	0	2
RDT 105	Patient Care/Medical Ethics	3	0	0	3
ORI 101	College Orientation	1	0	0	1
		23	2	0	24
SECOND QUARTER					
BIO 205	Anatomy and Physiology II	4	2	0	5
ENG 112	Freshman Composition II	5	0	0	5
RDT 107	Positioning I	3	4	0	5
RDT 116	Principles of Exposure I	3	0	0	3
RDT 111	Clinical Education I	0	0	15	5
		15	6	15	23
THIRD QUARTER					
ENG 103	Report Writing	3	0	0	3
BIO 206	Anatomy and Physiology II	4	2	0	5
RDT 108	Positioning II	3	4	0	5
RDT 117	Principles of Exposure II	3	2	0	4
RDT 112	Clinical Education II	0	0	15	5
		13	8	15	22
FOURTH QUARTER					
RDT 109	Positioning III	3	4	0	5
RDT 110	Radiation Protection/Biology	3	0	0	3
RDT 237	Radiologic Technology Project	4	0	0	4
RDT 113	Clinical Education III	0	0	24	8
		10	4	24	20
FIFTH QUARTER					
ENG 204	Oral Communications	3	0	0	3
RDT 201	Radiographic Physics I	3	0	0	3
RDT 205	Special Procedures I	3	0	0	3
RDT 215	Clinical Education IV	0	0	24	8
		9	0	24	17
SIXTH QUARTER					
PSY 102	Introduction to Psychology	3	0	0	3
RDT 202	Radiologic Physics II	3	0	0	3
RDT 206	Special Procedures II	3	0	0	3
RDT 216	Clinical Education V	0	0	24	8
		9	0	24	17
SEVENTH QUARTER					
EDP 102	Computer Literacy for Beginners	1	2	0	2
RDT 210	Introduction to the Study of Disease	3	0	0	3
RDT 203	Film Critique	3	0	0	3
RDT 217	Clinical Education VI	0	0	24	8
		7	2	24	16
EIGHTH QUARTER					
RDT 238	Radiologic Technology Seminar	3	0	0	3
RDT 218	Clinical Education VII	0	0	36	12
		3	0	36	15

Admissions Procedures:

The Radiologic Technology Curriculum is twenty-four (24) consecutive months in which a class is admitted in the fall of each year. Applications should be completed and submitted with all requested information by March 1 of the year the student wishes to enroll in the program. However, if all slots have not been filled after the deadline there may be extensions to the deadline.

The applicant must:

1. Complete the application for admission to the College.
2. Be a high school graduate or equivalent prior to matriculation in the program.
3. Be eighteen (18) years of age by the start of the second quarter of the year admitted to the program.
4. Make satisfactory scores on the college Allied Health Admissions Test.
   a. A 30 day waiting period is required before retesting to allow time for developmental studies
      OR
   b. Have a SAT composite score of 800 or higher (or comparable score on ACT)
5. Have a high school grade point average of 2.0 or higher on a 4.0 scale or have a 2.0 grade point average on a 4.0 scale for previous college work.
6. Submit official copies of transcripts or records of high school and/or acceptable GED scores and all post-secondary schools. These should be sent directly from institutions.
7. Have a personal interview which will be conducted using objective evaluation methods (applicants will be notified of dates and times).
8. Students who are selected for the program must also submit the college's physical examination, dental and immunization report completed by a physician and a dentist.

All applicants will be notified in writing of the action taken in the selection process whether it be notifications of acceptance, waiting list status, or a denial.

When a given class has been filled, a waiting list for the current academic year is established for qualified applicants who could not be accepted. Openings which occur will be filled from this list up to and through the fall registration period.

Those applicants that were not selected or failed to complete all the admission requirements must re-apply for admission to the next class, if they still wish to be considered. However, they may take general technology curriculum core courses. Applications must be updated annually by applicants who were not accepted the previous year.

The quota of applicants accepted and enrolled in the program is limited by the number of students authorized for each clinical facility by the Joint Review Committee on Education in Radiologic Technology.

Applicants applying for transfer from another college/ university or military Radiologic Technology Program must have a letter indicating that they were in satisfactory academic standing and must meet all curriculum requirements of the program and show evidence that previous course work is equivalent to courses required by the Radiologic Technology curriculum established for Southwestern Community College.

REAL ESTATE
T-127

The purposes of the Real Estate curriculum are to: (1) prepare the individual to enter the real estate industry, (2) provide an educational program for persons directly involved in various phases of the real estate industry, and (3) provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through a thorough introduction to real estate principles, practices, industry ethics, finance, law, appraisal techniques and trends.

The curriculum will provide the opportunity for an individual to enter public or private employment in real estate areas such as sales, finance, devlopment, market analysis, valuation and property management. Advanced real estate job opportunities are available in areas such as brokerage, management, appraising or consulting.

COURSE AND HOUR REQUIREMENTS

		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
MAJOR COURSES:					
BUS 120	Accounting I	4	3	0	5
BUS 121	Accounting II	4	3	0	5
BUS 232	Sales Development	3	2	0	4
BUS 291	Fundamentals of Real Estate	6	0	0	6
BUS 290	Real Estate Finance	3	0	0	3
BUS 124	Construction Methods and Materials	3	0	0	3
BUS 289	Real Estate Law	4	0	0	4
BUS 285	Real Estate Market Valuation	3	0	0	3
BUS 296	Real Estate Ethics	3	0	0	3
BUS 292	Real Estate Brokerage Operations	3	0	0	3
BUS 297	Real Estate Seminar	3	0	0	3
BUS 298	Real Estate Investments and Taxation	4	0	0	4
BUS 299	Property Management	3	0	0	3
BUS 275	Land Use and Development	3	0	0	3
	Technical Elective	3	0	0	3
RELATED COURSES:					
MAT 110	Business Math	5	0	0	5
BUS 101	Introduction to Business	5	0	0	5
BUS 102	Typing I	2	3	0	3
BUS 115	Business Law I	5	0	0	5
EDP 104	Introduction to Data Processing	3	2	0	4
BUS 239	Marketing	5	0	0	5
BUS 248	BUS Economics I	5	0	0	5
	Related Elective				3
GENERAL EDUCATION:					
ENG 101	Language and Composition I	5	0	0	5
ENG 102	Language and Composition II	5	0	0	5
ENG 204	Oral Communications	3	0	0	3
PSY 109	Human Realtions	3	0	0	3
	Social Science Elective				3
WORK EXPERIENCE:		0	0	0	0
TOTAL CREDITS:					105-116

AWARD: Associate of Applied Science

CURRICULUM BY QUARTERS

		HOURS			
	Title	**Class**	**Lab**	**Clinic**	**Credit**
FIRST QUARTER					
ENG 101	Language and Composition I	5	0	0	5
MAT 110	Business Math	5	0	0	5
BUS 101	Introduction to Business	5	0	0	5
BUS 291	Fundamentals of Real Estate	6	0	0	6
		21	0	0	21

SECOND QUARTER

ENG 102	Language and Composition II	5	0	0	5
BUS 120	Accounting I	4	3	0	5
BUS 102	Typing I	2	3	0	3
BUS 290	Real Estate Finance	3	0	0	3
BUS 248	Business Economics I	5	0	0	5
		19	6	0	21

THIRD QUARTER

BUS 121	Accounting II	4	3	0	5
BUS 124	Construction Methods and Materials	3	0	0	3
ENG 204	Oral Communications	3	0	0	3
BUS 289	Real Estate Law	4	0	0	4
BUS 285	Real Estate Market Valuation	3	0	0	3
		17	3	0	28

FOURTH QUARTER

BUS 296	Real Estate Ethics	3	0	0	3
BUS 292	Real Estate Brokerage Opeations	3	0	0	3
EDP 104	Introduction to Data Processing	3	2	0	4
BUS 115	Business Law I	5	0	0	5
	Elective (Social Science)	3	0	0	3
		17	2	0	18

FIFTH QUARTER

BUS 232	Sales Development	3	2	0	4
BUS 297	Real Estate Seminar	3	0	0	3
BUS 298	Real Estate Investments and Taxation	4	0	0	4
PSY 109	Human Relations	3	0	0	3
	Technical Elective	3	0	0	3
		16	2	0	17

SIXTH QUARTER

BUS 239	Marketing	5	0	0	5
BUS 299	Property Management	3	0	0	3
BUS 275	Land Use and Development	3	0	0	3
	Related Elective	3	0	0	3
	Elective	3	0	0	3
		17	0	0	17

RECOMMENDED RELATED ELECTIVES

COE 101	Cooperative Work Experience	0	10	0	1
COE 102	Cooperative Work Experience	0	20	0	2

RECREATION ASSOCIATE
T-094

The Recreation Associate curriculum trains individuals to plan and direct recreational activities for all age groups. The program is divided to meet the needs of those who work with the following categories of people and facilities: pre-school, school-age, adults, senior citizens, public and private recreational sites and facilities. Practical administration will be provided in all areas of instruction.

Employment opportunities for professionally trained leaders exist in: community programs, projects of local governments, YMCAs, YWCAs, Boys Clubs, Boy Scouts, Girl Scouts, hospitals, nursing homes, penal institutions, state parks, federal parks, industry, public and private resorts, summer camps, rehabilitation programs and regional institutions.

COURSE AND HOUR REQUIREMENTS

Title		Class	Lab	Credit
MAJOR COURSES:				
REC 108	Introduction to Recreation	3	0	3
REC 110	Recreation Activities	3	2	4
REC 113	Music Therapy	2	6	5
REC 115	Therapeutic Crafts I	3	6	6
REC 116	Therapeutic Crafts II	3	6	6
REC 120	Social Recreation Leadership	2	2	3
REC 134	First Aid and Safety	1	2	2
REC 145	Aerobic Conditioning I	0	2	1
REC 150	Aerobics for the Older Adult	0	4	2
REC 201	Principles of Supervision in Recreation	5	0	5
REC 202	Recreation for Special Populations	3	4	5
REC 203	Outdoor Recreation	2	6	5
REC 204	Special Topics in Recreation	0	10	5
REC 249	Leadership Techniques in Recreation	5	0	5
REC 250	Recreation Programming	3	2	4
REC 259	Recreation Administration	5	0	5
REC 266	Special Recreation	3	0	3
		43	52	69
RELATED COURSES:				
BIO 101	General Biology	3	4	5
BIO 102	Anatomy and Physiology I	4	2	5
PSY 109	Human Relations	3	0	3
MAT 110	Business Math	5	0	5
ORI 101	College Orientation	1	0	1
PSY 204	Psychology of Aging	5	0	5
		21	6	24
GENERAL EDUCATION:				
ENG 110	Freshman Composition I	5	0	5
ENG 112	Freshman Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 103	General Psychology	5	0	5
		18	0	18
WORK EXPERIENCE:		0	0	0
ELECTIVES:		5	0	5
TOTAL CREDITS:				116

AWARD: Associate of Applied Science Degree

RESPIRATORY CARE TECHNOLOGY
T-091

The Respiratory Care Technology curricula offer career education options for respiratory therapists and/or respiratory therapy technicians.

The respiratory therapist specializes in the application of scientific knowledge and theory to practical, clinical problems of respiratory care. Knowledge and skills for performing these functions are usually achieved through two or more years of academic and clinical preparation. The respiratory therapist is qualified to assume primary clinical responsibility for all respiratory care modalities, including responsibilities involved in supervision of respiratory technician functions. The therapist is frequently required to exercise considerable independent, clinical judgment in the respiratory care of patients under the direct or indirect supervision of a physician. Further, the therapist is capable of serving as a technical resource person to the physician with regard to current practices in respiratory care, and to the hospital staff as to effective and safe methods for administering respiratory care.

The technician's role does not require the exercising of independent, clinical judgment; however, the technician is expected to adjust or modify therapeutic techniques within well-defined procedures based on a limited range of patient responses. Therefore, the effective use of the technician, especially in the critical care setting, requires the supervision of a respiratory therapist or a physician experienced in respiratory care. Knowledge and skills for performing these functions are usually achieved through one or more years of academic and clinical preparation.

Graduates of the technician and therapist curricula are eligible to apply for admission to the Entry Level Respiratory Therapy Practitioner (CRTT) examination given by the National Board for Respiratory Care. Graduates of the therapist level curriculum are eligible to apply for admission to the Advanced Respiratory Care Practitioner (RRT) examination.

Graduates may be employed in a wide variety of health related areas including hospitals (in respiratory care, special services, cardiopulmonary, anesthesiology, or pulmonary medicine departments), respiratory equipment sales and rental companies, rehabilitation centers, skilled nursing care facilities, and educational and research institutions.

Individuals desiring a career in respiratory care technology should take biology, algebra and chemistry courses prior to entering program.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Clinic	Credit
MAJOR COURSES:					
RTH 101	Orientation to Respiratory Therapy	3	0	6	5*
RTH 103	Cardiopulmonary Physiology	4	2	0	5*
RTH 104	Cardiopulmonary Rehabilitation	1	0	0	1*
RTH 105	Theories and Principles I	4	2	0	5*
RTH 106	Pathophysiology	4	0	0	4*
RTH 107	Microbiology for Respiratory Therapy	3	4	0	5*
RTH 108	Theories and Principles II	1	2	0	2*
RTH 109	Pharmacology	2	0	0	2*
RTH 111	Clinical Experience I	0	0	15	5*
RTH 112	Clinical Experience II	0	0	18	6*
RTH 113	Clinical Experience III	0	0	18	6*
RTH 201	Ventilators	2	2	0	3
RTH 202	Intensive Respiratory Care	3	0	0	3
RTH 203	Pediatrics	2	0	0	2
RTH 204	Pulmonary Function	3	0	0	3
RTH 216	Clinical Experience IV	0	0	18	6
RTH 217	Clinical Experience V	0	0	18	6
RTH 218	Clinical Experience VI	0	0	27	9
RTH 220	Respiratory Therapy Department Operations	1	0	0	1
RTH 224	Respiratory and Hemodynamic Monitoring Techniques	2	2	0	3
		35	14	120	82
RELATED COURSES:					
BIO 102	Anatomy and Physiology I	4	2	0	5*
CHM 101	Chemistry I	3	4	0	5*
CHM 102	Chemistry II	3	4	0	5*
EDP 102	Computer Literacy for Beginners	1	2	0	2
EDP 104	Introduction to Data Processing	3	2	0	4
EDT 102	Management of Medical Emergencies	2	2	0	3*
		16	16	0	24
GENERAL EDUCATION COURSES:					
ENG 101	Language and Composition I	5	0	0	5*
ENG 102	Language and Composition II	5	0	0	5*
ENG 204	Oral Communications	3	0	0	3
PSY 103	General Psychology	5	0	0	5
***	*** General Education Elective	3	0	0	3
		21	0	0	21
ELECTIVES:		0	0	0	0
WORK EXPERIENCE:		0	0	0	0
RECOMMENDED GENERAL EDUCATION ELECTIVE:					
SOC 101	Introduction to Sociology	3	0	0	3
TOTAL CREDITS:					127
AWARD:		Associate Degree of Applied Science			

*Technician option.

CURRICULUM BY QUARTERS

		HOURS Class	Lab	Clinic	Credit
FIRST QUARTER					
BIO 102	Anatomy and Physiology I	4	2	0	5
EDT 102	Management of Medical Emergencies	2	2	0	3
ENG 101	Language and Composition I	5	0	0	5
RTH 101	Orientation to Respiratory Therapy	3	0	6	5
		14	4	6	18
SECOND QUARTER					
RTH 103	Cardiopulmonary Physiology	4	2	0	5
ENG 102	Language and Composition II	5	0	0	5

RTH 111	Clinical Experience I	0	0	15	5
CHM 101	Chemistry I	3	4	0	5
		12	6	15	20

THIRD QUARTER

CHM 102	Chemistry II	3	4	0	5
RTH 106	Pathophysiology	4	0	0	4
RTH 112	Clinical Experience II	0	0	18	6
RTH 104	Cardiopulmonary Rehabilitation	1	0	0	1
RTH 105	Theories and Principles I	4	2	0	5
		12	6	18	21

FOURTH QUARTER

RTH 113	Clinical Experience III	0	0	18	6
RTH 107	Microbiology for Respiratory Therapy	3	4	0	5
RTH 108	Theories and Principles II	1	2	0	2
RTH 109	Pharmacology	2	0	0	2
		6	6	18	15

FIFTH QUARTER

RTH 216	Clinical Experiences IV	0	0	18	6
ENG 204	Oral Communications	3	0	0	3
RTH 201	Ventilators	2	2	0	3
RTH 202	Intensive Respiratory Care	3	0	0	3
***	*** General Education Elective	3	0	0	3
		11	2	18	18

SIXTH QUARTER

RTH 217	Clinical Experience V	0	0	18	6
PSY 103	General Psychology	5	0	0	5
RTH 203	Pediatrics	2	0	0	2
RTH 204	Pulmonary Function	3	0	0	3
EDP 102	Computer Literacy for Beginners	1	2	0	2
		11	2	18	18



SEVENTH QUARTER

RTH 218	Clinical Experience VI	0	0	27	9
RTH 220	Respiratory Therapy Department Operations	1	0	0	1
RTH 224	Respiratory and Hemodynamic Monitoring Techniques	2	2	0	3
EDP 104	Introduction to Data Processing Systems	3	2	0	4
		6	4	27	17

SECRETARIAL — EXECUTIVE
T-030

The purposes of the Secretarial — Executive curriculum are to: prepare the individual to enter the secretarial profession, to provide an educational program for individuals wanting education for upgrading (moving from one secretarial position to another) or retraining (moving from present position to secretarial position), and to 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 typewriting, shorthand, transcription and business machines. Through these skills the individual will be able to perform office-related activities and through the development of personal competencies and qualities will be provided the opportunity to enter the secretarial profession.

COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Credit
MAJOR COURSES:				
BUS 102	Typing I	2	3	3
BUS 103	Typing II	2	3	3
BUS 110	Office Machines	1	2	2
BUS 104	Typing III	2	3	3
BUS 209	Machine Transcription	2	0	2
BUS 205	Advanced Typing	2	3	3
BUS 202	Word Processing Systems I	1	4	3
BUS 203	Word Processing Systems II	3	0	3
BUS 214	Secretarial Procedures	3	2	4
BUS 201	Principles of Word Processing	3	0	3
BUS 248	Business Economics I	5	0	5
BUS 101	Introduction to Business	5	0	5
*** ***	Technical Elective (Option 1 or 2)	18	12	21
		49	32	60

RELATED COURSES:

MAT 110	Business Math	5	0	5
EDP 104	Introduction to Data Processing	3	2	4
EDP 102	Computer Literacy for Beginners	1	2	2
BUS 120	Accounting I	4	3	5
BUS 121	Accounting II	4	3	5
BUS 229	Income Taxes I	3	2	4
BUS 237	Small Business Management	3	2	4
BUS 131	Business Communications	3	2	4
ORI 101	College Orientation	1	0	1
		27	16	34

GENERAL EDUCATION:

ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
PSY 109	Human Relations	3	0	3
ENG 103	Report Writing	3	0	3
		19	0	19

WORK EXPERIENCE:

COE 102	Cooperative Work Experience*	0	20	2

ELECTIVE:		4	0	4

TECHNICAL ELECTIVE:

Option 1:

BUS 106	Shorthand I	3	2	4
BUS 107	Shorthand II	3	2	4
BUS 108	Shorthand III	3	2	4
BUS 206	Dictation and Transcription I	3	2	4
BUS 207	Dictation and Transcription II	3	2	4
BUS 208	Dictation and Transcription III	3	2	4

Option 2:

BUS 233	Curent Trends in Business Management	3	2	4
BUS 232	Sales Development	3	2	4
BUS 115	Business Law	5	0	5
BUS 221	Payroll Accounting	2	2	3
BUS 239	Marketing	5	0	5

RECOMMENDED ELECTIVES:

COE 101	Cooperative Work Experience	0	10	1
COE 103	Cooperative Work Experience	0	30	3

*An additional four hours of co-op may be substituted for a free elective.

TOTAL CREDITS: 119

AWARD: Associate of Applied Science Degree

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
MAT 110	Business Math	5	0	5
BUS 101	Introduction to Business	5	0	5
BUS 102	Typing I	2	3	3
ORI 101	College Orientation	1	0	1
BUS 106	Shorthand I	3	2	4
OR				
BUS 115	Business Law	5	0	5
		21/23	5/3	23/24
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
BUS 103	Typing II	2	3	3
BUS 107	Shorthand II	3	2	4
OR				
EDP 102	Computer Literacy for Beginners	1	2	2
BUS 120	Accounting I	4	3	5
BUS 110	Office Machines	1	2	2
		15/13	10	19/17
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 104	Typing III	2	3	3
BUS 209	Machine Transcription	2	0	2
BUS 108	Shorthand III	3	2	4
OR				
BUS 239	Marketing	5	0	5
BUS 121	Accounting II	4	3	5
PSY 109	Human Relations	3	0	3
		17/19	8/6	20/21
FOURTH QUARTER				
COE 102	Cooperative Work Experience	0	20	2
FIFTH QUARTER				
BUS 131	Business Communications	3	2	4
BUS 205	Advanced Typing	2	3	3
BUS 202	Word Processing Systems I	1	4	3
BUS 206	Dictation and Transcription I	3	2	4
OR				
BUS 232	Sales Development	3	2	4
EDP 104	Introduction to Data Processing	3	2	4
		12	13	18
SIXTH QUARTER				
BUS 229	Income Taxes I	3	2	4
BUS 203	Word Processing Systems II	3	0	3
BUS 207	Dictation and Transcription II	3	2	4
OR				
BUS 221	Payroll Accounting	2	2	3
BUS 248	Business Economics I	5	0	5
ENG 103	Report Writing	3	0	3
		17/16	4	19/18

SEVENTH QUARTER				
BUS 237	Small Business Management	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 201	Principles of Word Processing	3	0	3
BUS 208	Dictation and Transcription III	3	2	4
OR				
BUS 233	Current Trends in Business Management	3	2	4
***	*** Elective	4	0	4
		16	6	19



SOLAR MECHANIC
V-123

The Solar Mechanic curriculum offers training in practical applications of solar energy to provide space heating and cooling and hot water for residential and commercial uses. The courses will provide the skills necessary for the solar mechanic to install, maintain and repair solar systems.

It is designed both for the experienced heating/air conditioning mechanic desiring to become proficient in solar energy and for those seeking a specialty.



COURSE AND HOUR REQUIREMENTS

	Title	HOURS Class	Lab	Shop	Credit
MAJOR COURSES:					
EGY 1115	Solar Energy	12	6	0	15
EGY 1123	Solar Pipework	1	4	0	3
EGY 1130	Passive Solar I	5	0	0	5
EGY 1125	Solar Domestic Hot Water	4	4	0	6
EGY 1142	Active Solar Space Conditioning	5	4	0	7
EGY 1143	Installation and Maintenance of Solar Systems	1	4	0	3
EGY 1131	Passive Solar II	6	0	0	6
EGY 1156	Professional Seminar	5	0	0	5
		39	22	0	50
RELATED COURSES:					
ORI 101	College Orientation	1	0	0	1
MAT 1112	Mathematics: Building Trades	2	0	0	2
DFT 1110	Blueprint Reading: Building Trades	1	0	3	2
MAT 1109	Estimating: Building Trades	4	0	0	4
AHR 1119	Distribution Design and Duct Fabrication	1	4	0	3
AHR 1114	Warm Air Systems	1	4	0	3
DFT 1131	Drafting: Building Trades	1	0	3	2
ELC 1123	Electrical and Control Systems	1	2	0	2
		12	10	6	19
GENERAL EDUCATION:					
ENG 1106	Fundamentals of English	3	0	0	3
PSY 109	Human Relations	3	0	0	3
		6	0	0	6
WORK EXPERIENCE:					
EGY 1155	Supervised Work Experience	0	20	0	2
ELECTIVES:					0
TOTAL CREDITS:					77
AWARD:					Diploma

SURVEYING TECHNOLOGY
T-125

The program is designed to provide training for technicians in the many areas of surveying. Surveyors are involved in land surveying, route surveying, photogrammetry, mapping, and other areas of land description and measurements. Nearly all construction of buildings, bridges, dams, highways, airfields and other engineered projects requires one or more types of surveying.

Students will be trained as technicians to work with skilled professionals as instrument men, party chiefs, surveying aides, highway surveyors, mappers, and in many other surveying activities. Graduates of this program will be prepared to pursue the requirements necessary to become a registered land surveyor.

COURSE AND HOUR REQUIREMENTS

		Title	Class	Lab	Shop	Credit
MAJOR COURSES:						
CIV	101	Surveying I	1	2	6	4*
CIV	121	Computations I	4	0	0	4
CIV	102	Surveying II	1	2	6	4*
CIV	103	Surveying III	1	2	6	4*
CIV	109	Surveying Law	4	0	0	4
CIV	211	Topographic Surveying	1	2	6	4
CIV	217	Construction Methods and Equipment	3	0	0	3
CIV	223	Codes, Contracts and Specifications	2	0	0	2
CIV	228	Introduction to Drainage	2	0	3	3
CIV	212	Route Surveying	2	0	6	4
CIV	226	Properties of Highway Materials	3	2	0	4
CIV	229	Highway Drainage	2	0	3	3
CIV	114	Statics	4	0	0	4
CIV	213	Advanced Land Surveying	3	0	3	4
CIV	214	Mapping and Subdivision Planning	2	0	6	4
CIV	227	Construction of Roads and Pavements	2	0	3	3
CIV	230	Subdivision Drainage	2	0	3	3
CIV	100	Boundary Control	5	0	0	5*
			44	10	51	66
RELATED COURSES:						
DFT	101	Technical Drafting I	0	6	0	2
DFT	105	Surveying Drafting	4	4	0	6*
MAT	111	Applied Trigonometry	5	0	0	5*
DFT	106	Civil Drafting	2	6	0	4
PHY	101	Physics: Mechanics	3	2	0	4
PHY	102	Physics: Heat, Sound and Light	3	2	0	4
MAT	103	Foundation Skills for Algebra	3	0	0	3*
MAT	105	Introduction to Algebra	5	0	0	5*
			25	20	0	33
GENERAL EDUCATION:						
ENG	101	Language and Composition I	5	0	0	5
ENG	102	Language and Composition II	5	0	0	5
***	***	Social Science Elective	5	0	0	5
ENG	204	Oral Communications	3	0	0	3
ENG	103	Report Writing	3	0	0	3
			21	0	0	21
WORK EXPERIENCE:						0
ELECTIVES:						0
TOTAL CREDITS:						120

AWARD: Associate of Applied Science Degree

* Certificate

CURRICULUM BY QUARTERS
(Certificate Option)

		HOURS			
		Class	**Lab**	**Field**	**Credit**
FIRST QUARTER					
CIV 101	Surveying I	1	2	6	4
MAT 103	Foundations Skills for Algebra	3	0	0	3
		4	2	6	7
SECOND QUARTER					
DFT 105	Surveying Drafting	4	4	0	6
MAT 105	Introduction to Algebra	5	0	0	5
		9	4	0	11
THIRD QUARTER					
CIV 102	Surveying II	1	2	6	4
MAT 111	Applied Trigonometry	5	0	0	5
		6	2	6	9
FOURTH QUARTER					
CIV 103	Surveying III	1	2	6	4
CIV 100	Boundary Control	5	0	0	5
		6	2	6	9



ASSOCIATE DEGREE FOR VOCATIONAL INSTRUCTORS
T-109

The Associate Degree Program for Vocational Instructors is designed for individuals who are skilled and experienced in a trade or technical speciality and who would like to receive an associate degree in preparation for teaching or for other purposes. Credit toward the associate degree is given for previous education, training and/or experience.

Graduates of this curriculum will be eligible for employment in the vocational or technical instructional programs in the secondary schools, community colleges or technical institutes.

COURSE AND HOUR REQUIREMENTS — HOURS

Title		Class	Lab	Credit
MAJOR COURSES:				
Speciality Skills (Awarded toward experience in the field)				48
20 Hours Awarded From the Following:				20
EDU 110	Methods of Teaching Industrial Subjects	3	0	3
EDU 111	Use of Media in Instruction I	3	0	3
EDU 112	Shop Organization and Planning I	2	2	3
EDU 113	Shop Organization and Planning II	2	2	3
EDU 114	Safety in the School Shop and Laboratory	3	0	3
EDU 115	Introduction to Industrial Education	3	0	3
EDU 116	History and Philosophy of Industrial Education	3	0	3
EDU 117	Program and Course Development	3	0	3
EDU 118	Principles of Cooperative Education	3	0	3
EDU 119	Occupational Guidance	3	0	3
EDU 121	Drafting for the Vocational Instructor I	3	0	3
EDU 123	Environmental Concepts in Education	3	0	3
EDU 124	Teaching the Handicapped Student in Occupational Education	3	0	3
EDU 125	Drafting for Vocational Instructor II	3	0	3
EDU 140	Use of Media in Instruction II	3	0	3
RELATED COURSES:				
ORI 101	College Orientation	1	0	1
***	*** Math Elective (MAT 101 or Higher)	5	0	5
***	*** Science Elective	5	0	5
***	*** Related Electives	15	0	15
		26	0	26
GENERAL EDUCATION:				
ENG 101	Language and Composition I	5	0	5
ENG 102	Language and Composition II	5	0	5
ENG 204	Oral Communications	3	0	3
ENG 103	Report Writing	3	0	3
***	*** Social Science Electives	6	0	6
		22	0	22
WORK EXPERIENCE:				0
ELECTIVES:				0
TOTAL CREDITS:				116

AWARD: Associate of Applied Science Degree

Credit will be awarded to skilled craftsmen based on educational experience and work experience. Credit will be awarded in the following manner:

Twenty-four quarter hours' credit for full-time trade school, twelve months in one special skill as are certified by diploma or

letter by trade school officials, maximum twenty-four quarter credit hours.

and/or

One quarter hour credit per sixty hours of full-time trade inspection for programs of less than one year duration. Certified by diploma or letter by trade school officials, maximum eight credit hours.

One quarter hour credit per forty hours of special course instruction-company sponsored school. Certified by diploma, certificate, or letter by company school. Maximum five hours.

Five quarter hours credit for each full year of employment in a teaching situation. Teaching must be the primary responsibility of employment. Maximum ten hours.

Two quarter hours credit for each full year employment in the specialty occupation qualified to teach. Maximum ten hours.

The maximum number of hours awarded for specialty skills toward an Associate in Applied Science Degree is 48 quarter hours.

A minimum of 56 quarter hours credit must be earned through coursework at Southwestern Community College or another recognized college or technical institute program. In order to earn an Associate in Applied Science Degree, the general education requirements must be met either through transfer credit, challenge examination, or formal course work.

A program of study will be prepared for each individual vocational instructor or potential instructor who makes application for the program. The Associate Dean for Instructional Services will serve as advisor.



WELDING
V-050

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

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

COURSE AND HOUR REQUIREMENTS

Title			HOURS Class	Lab	Shop	Credit
MAJOR COURSES:						
FIRST QUARTER						
*WLD	1102	Oxyacetylene Welding and Cutting	6	0	18	12
*WLD	1108	Arc Welding	5	0	18	11
*WLD	1112	Advanced Arc Welding and Inert Gas	4	0	15	9
*WLD	1106	Pipe Welding and Test Procedures	6	0	18	12
***	***	Technical Elective	3	0	0	3
			24	0	69	47
RELATED COURSES:						
ELC	1110	Basic Electricity	1	3	0	2
DFT	1122	Blueprint Reading and Sketching: Mechanical	1	3	0	2
MAT	1114	Math for Pipefitters and Plumbers	4	0	0	4
DFT	1121	Blueprint Reading for Welders	3	0	0	3
DFT	1120	Template Development and Pipe Layout	3	3	0	4
ORI	101	College Orientation	1	0	0	1
			13	9	9	16
GENERAL EDUCATION:						
MAT	1112	Mathematics of Building Trades	2	0	0	2
ENG	1111	Reading Comprehension	2	0	0	2
PSY	109	Human Relations	3	0	0	3
			7	0	0	7
WORK EXPERIENCE:						0
TECHNICAL ELECTIVES:						
WLD	1110	Metallurgy	3	0	0	3
*WLD	1114	Practical Shop: SMAW Welding (Certification Procedures)	0	0	18	6
*WLD	1115	Practical Shop: Inert Gas Welding (Certification Procedures)	0	0	18	6
*WLD	1117	Structural Welding: Certification Procedures	2	0	6	4
TOTAL CREDITS:						70

AWARD: Diploma
*Evening Program Certificate

CURRICULUM BY QUARTERS

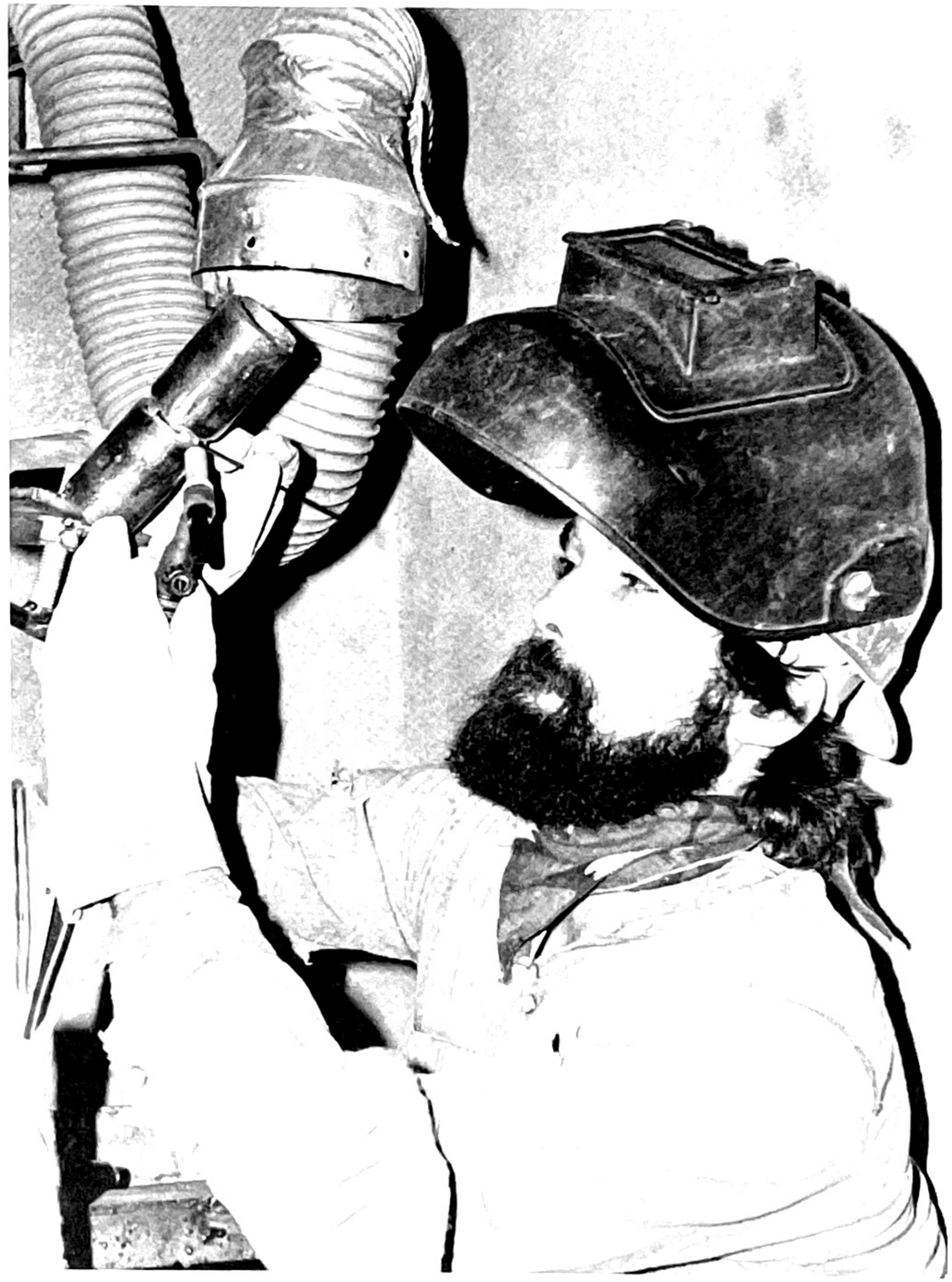
			HOURS Class	Lab	Shop	Credit
FIRST QUARTER						
WLD	1102	Oxyacetylene Welding and Cutting	6	0	18	12
MAT	1112	Mathematics of Building Trades	2	0	0	2
ORI	101	College Orientation	1	0	0	1
ELC	1110	Basic Electricity	1	3	0	2
			10	3	18	17
SECOND QUARTER						
WLD	1108	Arc Welding	5	0	18	11
DFT	1122	Blueprint Reading and Sketching: Mechanical	1	3	0	2
PSY	109	Human Relations	3	0	0	3
			9	3	18	16

THIRD QUARTER

WLD 1112	Advanced Arc Welding and Inert Gas	4	0	15	9
ENG 1111	Reading Comprehension	2	0	0	2
MAT 1114	Math for Pipefitters and Plumbers	4	0	0	4
DFT 1121	Blueprint Reading for Welders	3	0	0	3
		13	0	15	18

FOURTH QUARTER

WLD 1106	Pipe Welding and Test Procedures	6	0	18	12
DFT 1120	Template Development and Pipe Layout	3	3	0	4
***	*** Technical Elective	3	0	0	3
		12	3	18	19





Continuing Education

COLLEGE CONTINUING EDUCATION PROGRAMS OF STUDY

CONTINUING EDUCATION DIVISION

The Continuing Education Division is committed to the concept of life-long learning. It is the purpose of Southwestern Community College to provide an opportunity for citizens to develop their fullest potential in whatever vocational, intellectual, or cultural areas they desire. It is also the purpose of Southwestern Community College to offer low cost educational opportunities to any adult regardless of his educational background.

The Continuing Education Division supports the purposes of the college by offering courses in Jackson, Macon, and Swain Counties. The Continuing Education Division always welcomes requests for courses and any suggestions that will help in providing better service to the community.

Extension courses are specially designed courses, usually of short duration ranging from a few hours to one or more quarters, structured so that they provide educational opportunities either to prepare for entry into an occupation, to upgrade the occupational competence of those already employed in the occupation, or to work toward self-improvement.

Extension classes do not earn academic credits which can be recognized in a diploma or degree program; however, a certificate is awarded upon successful completion. For some courses, C.E.U.'s (Continuing Education Units) will be awarded, one C.E.U. may be given for each ten contact hours of participation in an organized Continuing Education class.

Cost

Registration fees for occupational courses are $15.00. Academic courses and practical skills courses are $20.00, and avocational courses $25.00. All Adult Basic Education and GED courses are free. Adults, 65 or older, who are residents of North Carolina may take courses without paying tuition.

Enrollment

Call the Continuing Education Office, 586-4091 (Jackson), 369-7331 (Macon), 497-7233 (Cherokee/Swain), to preregister. Schedules of courses are sent to all postal patrons before the beginning of each quarter.

Course Offerings

The following is a partial list of courses offered through the Continuing Education Division. Others can be offered if twelve or more persons are interested in a course.

Adult Basic Education

The purpose of the Adult Basic Education program at Southwestern Community College is to provide an educational opportunity for those adults in the tri-county service area who did not complete their public school education. Classes are designed in a flexible manner to allow for individual differences in persons who have been out of the public school system from six months to thirty years or more. Students' varying levels of motivation, ability, time and work habits, and class commitment are all taken into consideration in working toward realistic student goals.

Adult Basic Education stresses literacy development from beginning reading to pre-GED study. Conventional basic literacy instruction emphasizes a general competency in basic word attack, comprehension, and vocabulary skills as well as some

basic knowledge in the social studies and science area. Functional literacy, math, and English skills are also developed. Instructional methods and materials appropriate for adults are used to help promote more meaningful learning experiences. Pre-GED instruction provides further study in the math, English, social studies, science, and general reading areas. The program lays the groundwork for individuals to enter high school equivalency classes or to take the General Educational Development examination.

Open enrollment is maintained throughout the year in at least one general class per county to insure the opportunity for continuing education. Specialized ABE classes are established at various locations in the service areas. There is no fee for registration or for instructional materials.

Adult Basic Literacy Education

The Adult Basic Literacy Education program (ABLE) utilizes computer assisted instruction in Jackson, and Macon counties.

General Education Development (High School Preparation)

A review or refresher course in mathematics, reading, and English for individuals preparing to take the high school equivalency (GED) Test. Instruction is designed to meet the needs of individuals at their own particular education level and at their own rate of learning. Enrollment in the class is open at all times. This refresher study will aid the individual in successfully completing the High School Equivalency (GED) Exam and in receiving a High School Equivalency Certificate.

Compensatory Education

A program of study designed specifically for mentally retarded adults.

Academic Extension

Academic Extension courses are available in Art, Religion, Languages, Math, Social Sciences, Economics, Philosophy, Sociology, Psychology, Politics, and Science.

Occupational Extension

Occupational Extension offers courses in Agriculture, Horticulture, Civil Engineering, Business and Marketing, Hospitality, Health and Safety, Home Economics, Production Crafts, Electronics, Electricity, Building Trades, Service Trades, Automotive Fire Service, Law Enforcement, Masonry, Metal-working, Plastics, Seafood Occupations, and Textiles.

Practical Skills

Courses are available in Mechanics and Maintenance, Homemaking, Arts and Crafts, and other miscellaneous courses.

Avocational Courses

Various courses are offered for hobby and recreation.

Specialty Occupations

There are five areas of specialized training offered through the Continuing Education Division which are assisted by area consultants. These classes are designed to meet the general or specific training and re-training needs of groups, private individuals, employees in business, governmental agencies, and other public institutions. Participants can earn a number of certificates and awards upon successful completion.

Fisheries Training: This program is designed to assist present trout growers and make their operation more efficient as well as provide potential growers the necessary information to set up a

profitable operation. Major topics are Trout Feeding, Disease and Parasites, Marketing, Processing, Recreation Sales, Waste Disposal and Laws and Regulations; Watershed Management; and Artificial Bait Construction (Flytying) is designed to provide training needed to construct dry flies, wet flies, nymphs, and streamers.

Fire Service Training: A variety of courses are offered in cooperation with individual fire departments in the service area. Specific units are designed to increase the firefighter's technical knowledge and improve his skills in fireground operation. Classes may be offered in any order according to the needs of each fire department. Examples of Firemanship classes are:

Area Fire Schools
Arson Detection
Civil Disorder
Compressed Gas Emergencies
Fire Apparatus Practices
Fire Brigade Training
Firefighting Procedures
Fire Stream Practices
Forcible Entry
Home Fire Safety
Hospital Fire Safety
Hose Practices
Introduction to Firefighting
Ladder Practices
Officer Training
Portable Fire Extinguishers
Protective Breathing Equipment
Rescue Practices
Rope Practices
Salvage and Overhaul Practices
School Bus Evacuation
Ventilation
Teacher Education
Bombing and Bomb Threats

Management Development Program: The Management Development Program is designed to upgrade supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry.

The courses listed below are available to Southwestern Community College and may be credited toward Diploma in Management Development Training awarded by the Department of Community Colleges for the completion of any combination of courses totaling 160 hours. Credit may be given for courses previously taken at SCC or elsewhere.

Course Titles

Principles of Supervision
Job Relations Training
Science of Human Relations
Art of Motivating People
Economics in Business & Industry
Effective Communications
Effective Writing
Effective Speaking
Speed Reading
Work Measurement
Job Methods
Conference Leadership Training
Instructor Training
Creative Thinking
Industrial Safety & Accident Prevention
Industrial First Aid
The Supervisor in North Carolina
Job Analysis Training
Management Primer
Cost Accounting for Supervisors
Supervision in Hospitals

Hospitality: The Department of Community Colleges offers Hospitality Training as one answer to North Carolina's need for more trained personnel in the area of food, lodging, recreation and travel. Some examples of classes are:

Food Purchasing
Food Preparation
Housekeeping
Hospitality Human Relations
Hotel-Motel Management
Menu Planning
Modified Diets
School Food Service
Quantity Food Production
Use and Care of Equipment
Waiter-Waitress

Law Enforcement Training: In addition to Criminal Justice Protective Services Technology courses in the curriculum, various specialized law enforcement courses are conducted in the area served by Southwestern Community College, such as:

Brethalyzer Operator's Training
Criminal Law and Procedure
Narcotics and Dangerous Drugs
Criminal Investigation
Firearms Training
Defensive Tactics
Jail and Detention
Communications
First Aid
Courtroom Procedures

National Park Service Seasonal Ranger Training (Accredited by National Park Service)

A 376 hour basic training program designed to prepare Seasonal Park Rangers to perform law enforcement in areas administered by the National Park Service. The Session is eight weeks, 8:00 a.m. to 5:00 p.m., Monday through Friday, with some evening and Saturday classes, including CPR and First Responder First Aid.

Fees must be paid in full in advance in order to insure enrollment in the class. These fees are not refundable. (Fees will be refunded automatically if the program is full.)

New and Expanding Industry Training

Southwestern Community College is committed to the economic development of our region. Through assistance to new and/or expanding industry, we take a front line approach to help companies retain economic vitality by providing first-rate training when needed whether it is planning needs for the future, setting up programs for retraining or on-the-job training for new employees, the College is there with a 20-year concept of service to area industry.

Southwestern Community College representatives, along with industrial training specialist from the Industry Service Division of the Department of Community Colleges, will work with industries to design and implement training programs especially designed to fulfill the company's needs.

Human Resources Development

Human Resources Development (HRD) is an instructional program designed to help adults improve their employment future. The goal of the HRD Program is for participants to find and keep appropriate work or begin further training after completing an HRD class. HRD classes are small and tailored to meet the students' individual career goals.

Topics covered in class include career choice, self-image, communication skills, human relations on the job, decision making and goal-setting, stress management, and job search skills. Instruction in academic topics include math and English review, study and test-taking skills, GED preparation if desired, and information about further educational opportunities.

Classes usually meet twenty-two hours a week for five weeks. There is no registration fee and no charge for books. Anyone who is not currently working full-time may apply.

"OASIS" (Older Adult Special Instructional Services)

The "OASIS" Program at Southwestern Community College is an extension of former seminar and instruction to older adult (senior citizens) in the Jackson, Macon and Cherokee/Bryson City areas.

The major goal of this program is to involved older adults in the on-going curriculum and continuing education program at SCC, both on and off campus, as well as to establish new service and instruction programs.

It also provides training opportunities for service providers for older adults by way of group seminars and classes, as well as individual credit for service providers who wish to improve their skills.

At present, the target sites for instruction of older adults are rest/nursing homes and nutrition sites.

The goal of "OASIS" is to provide instruction and service through cooperation with the other area service agencies, the state programs, and the national aging organization.

Older adults, 65 or over, who are residents of North Carolina may take courses without paying tuition.

Inquiries about this program should be directed to the Division of Continuing Education at SCC.

The Visiting Artist Program

Southwestern Community College participates in the Visiting Artist Program sponsored by the North Carolina Department of Community Colleges. The purpose of the program is to enhance the appreciation and cultivation of the arts within the communities which the colleges serve.

Through special funding grants, a professional in the visual, literacy or performing arts is employed by the institution to serve as an "instructor-at-large" for the entire community rather than teaching a regular series of classes on the college campus.

In this capacity, the artist performs a wide range of functions, some of which may be lecture-demonstrations, concerts, and special program for public schools, civic clubs, art councils, radio/television appearances, church and community organizations.

The artist also organizes and participates in exchange programs with artist from other institutions around the state to bring varied artistic exposure to the institutions and the community.

The artists performs at no charge to the public.

The North Carolina Visiting Artist Program is unique being the first of its kind in the United States.

Telecommunications

Via satellite technology and through the Telecommunication Network System, the College offers a wide variety of programs to meet diverse training needs.

Program offerings each quarter include courses, workshops, and seminars on a variety of topics. Programs in education, health, business and industry government and community services are offered.

The college normally accesses The Learning Channel (TLC). Through this distributor the College has a number of valuable programs available geared to self improvement, leisure activities and development of career skills.

Through special arrangements other delivery systems can be accessed and special teleconferences can be arranged.

A full description of telecommunication and teleconferencing program services can be secured through the Department of Continuing Education.

General Education Development Tests (G.E.D)

Southwestern Community College is an official General Education Development Testing Center. These tests cover five broad areas: English Expression, Literature, Mathematics, Social Studies, and Natural Science.

Persons receiving a total passing score of 225 points with no single test score below 35 are awarded a High School Equivalency Certificate by the North Carolina Department of Public Instruction. This certificate is generally accepted on the same basis as a high school diploma for employment, job promotion, and higher education.

Preparation: A person wishing to take the G.E.D. tests should come to the College for an initial interview and preliminary counseling. If it appears that the individual is not yet fully ready to take the tests, he or she can select one of two ways to complete his or her preparation: The Adult Basic Education program or High School Equivalency classes. Any of these will help him or her to acquire the skills necessary for success on the tests.

Application requirements: In order to take the G.E.D. tests, a person must:

1. Be at least 18 years of age.
2. Be a resident of North Carolina.

3. File an application, which is available at the College or from his or her county Superintendent of Schools.

In the event that any single test score or the total score is unsatisfactory, a retest may be taken after six (6) months of further study.

At the time of application, a testing date will be set. Every effort will be made to arrange a time which will be at the convenience of the applicant so that he or she will not have to take time off from work or other responsibilities. G.E.D. testing sites have been established in Franklin and Cherokee, as well as on the SCC campus.

Jackson County Continuing Education

The office for Jackson County Continuing Education is located in the Vocational Building on SCC's campus. This office coordinates the Continuing Education classes for Jackson County. For more information about offerings call (704) 586-4091.

Macon County Continuing Education

The office for the Macon County Center of Southwestern Community College is located in the Industrial Park in Franklin, N.C. This office coordinates the Continuing Education and Curricula classes that are offered for Macon County. For more information about offerings, call (704) 369-7331.

Swain County/Cherokee Center Offices

Offices are located in Swain County on the Cherokee Indian Reservation, Acquoni Road in the Cherokee Boys Club Complex. This office coordinates the Continuing Education and Curricula classes that are offered for Swain County. For more information about offerings, call (704) 497-7233 or (704) 488-6413.

Pre-Registration

Pre-registration is essential on or before registration as announced. You may pre-register by mail or by calling the continuing education office nearest you. In Sylva 586-4091, in Cherokee/Swain 497-7233 or in Macon County 369-7331.



Course Descriptions

COURSE DESCRIPTIONS

AHR-101 Non-Solar Heating Systems (5-4-7)
Description of conventional heating and cooling systems, hydronic, forced air, and radiant heat delivery, refrigeration cycle, air conditioner, and heat pump operation; lab work in sheet metal fabrication and troubleshooting skills.

AHR-102 Air Conditioning Systems (2-2-3)
Basic principles of refrigeration, operation of heat pumps; combinations of heating and cooling equipment, and cooling towers.

AHR-201 Instrumentation and Controls (3-6-5)
Concepts and applications of various devices to control and monitor energy conversion systems; labwork in electrical wiring. Prerequisite: EGY 107 and ELC 109.

AHR-1101 Air Conditioning Systems (Automotive) (2-6-4)
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling or refrigerants in charging the system.

AHR-1102 Installation and Maintenance of Total Comfort Systems (3-9-6)
A study of the components and their function with other components and recognizing malfunctions and repair or replacement of components of the total comfort systems, including humidifiers, dehumidifiers and air filters. Solar students receive instruction in installation, maintenance, and troubleshooting of hydronic and forced air heating systems, heat pumps, and solar space heating systems.

AHR-1114 Warm Air Systems (1-4-3)
Size and rating of the different furnaces, fuels, combustion controls and installation of components which make up a complete heating system. Solar students receive instruction in forced air heating systems, heat sources, duct sizing and fabrication, controls.

AHR-1118 Heating and Cooling Load Calculations (3-0-3)
A detailed study of how accuracy of load calculations affect the total installed system. This course is essential to the entire program in that load calculations determine such things as the type of equipment selected for a job, the size and styling of the duct systems, the materials and labor required, and is also the basis of the project's working drawings.

AHR-1119 Distribution Design and Duct Fabrication (1-4-3)
The use of load calculations to size and design the distribution system and application of layout and fabrication of duct design.

ART-100 Art Orientation (1-0-1)
A study of the occupational possibilities available to an artist and of the artistic skills needed for future employment. Comparison of fine versed, commercial art styles, movements and trends.

ART-101 Art Appreciation (3-0-3)
A general education course open to all; design principles from the laymen's point of view, critical evaluations of selected works of painting, sculpture, and industrial design related to every day life.

AUT-1116 Automotive Engines (8-15-13)
A thorough study of the construction and operation of the components of internal combustion engines. Construction and layout of gasoline and diesel engine blocks are covered for both domestic and import automotive engines. Engine rebuilding is emphasized.

AUT-1119 Cooling and Lubrication Systems (2-3-3)
A complete study of the cooling and lubricant systems of an automotive engine. Emphasis is placed on radiators, heaters, water pumps, and the entire cooling and circulating system of an engine. Transmission cooling techniques, drive train lubrication, and related filtration devices for gasoline and diesel automobiles are covered.

AUT-1121 Braking Systems (3-6-5)
Braking principles are studied in relation to the coefficiencies of friction and heat, and the expansion of materials. The operation principles of hydraulic, pneumatic, combination, and vacuum brake systems are emphasized. Laboratory instruction is offered in the installation of brake shoes, shoe reconditioning, drum and rotor turning,

assembling and adjusting of brake systems and servicing of auxiliary units.

AUT-1123 Chassis and Suspension Systems (5-9-8)
Principles and functions for the components of domestic and imported automotive chassis. Instruction is oriented toward actual shop experience in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, types of suspension systems, and wheel alignments.

AUT-1124 Manual Transmissions and Power Trains (5-18-11)
A study of the various components which make up the automotive power train. Components to be studied include clutches, manual transmissions, drive shaft assemblies, differentials, or driving axles and transaxles. Theory of operations as well as troubleshooting maintenance and actual rebuilding and repairing the components is stressed in detail.

AUT-1126 Engine Diagnosis and Tune-Up (5-9-8)
This course is designed to provide depth in the understanding and use of various types of tune-up equipment. Through proper use of tune-up equipment, the student is expected to demonstrate his ability to diagnose malfunctions in ignition systems, starters, and charging circuits. The latest transistor and computerized ignition systems are explored. Comparisons of gasoline and diesel engines are discussed.

AUT-1127 Automatic Transmissions (5-15-10)
This course is designed to provide a measure of depth in the understanding of automatic transmissions. Instruction includes classroom study, demonstrations, and student participation in disassembly and testing of selected transmissions. Special emphasis is placed on principles, function, construction, operation, servicing and "troubleshooting" procedures of various types of automatic transmissions.

AUT-1128 Fuel Systems (5-15-10)
A study of the different types of fuel systems of an automobile engine. Characteristics of fuels, carburetors, and fuel injectors are covered along with servicing, maintenance, and methods of diagnosing and repairing. Comparisons of diesel fuel systems and how they differ from gasoline engines are also covered.

AUT-1129 Electrical and Electronic Systems (7-15-12)
A thorough study of the theory and operation of various automobile electrical units and systems such as batteries, generators, alternators, standard ignitions, transistorized ignitions, solenoids, magnetic switches, relays and other electrical components. Maintenance and testing procedures, along with the diagnosis and repair of electrical/electronic components found on the modern automobile are emphasized.

AUT-1208 Emission Controls (2-3-3)
The purpose of this course is to provide a basic knowledge of what the various Emission Control Systems are and how they operate. Exhaust emission control systems and evaporative emission control systems are covered along with the proper use of all test equipment involved in diagnosing emission control problems.

AUT-1507 Computer Controls (1-0-1)
This course provides a basic understanding of the function of the computer and methods of testing.

AUT-1508 Advanced Computer Controls (1-0-1)
Further study of the function of computer by giving students hands on experience in diagnostics through use of the on-board computer.

AUT-1524 Fuel Mechanisms (3-15-8)
The course provides a study of the various components found in automotive fuel systems. The operation and construction of carburetors, fuel pumps, intake and exhaust systems, along with typical carburetor adjustments are discussed.

AUT-1525 Electronic Fuel Injection (1-0-1)
A study of the operation of typical fuel injection and computer controlled carburetion systems is provided in the course along with an understanding of the associated troubleshooting procedures.

AUT-1526 Port Fuel Injection (1-0-1)
The course provides a continuation in the study of advanced fuel injection systems. Diagnosing of problems, disassembly, repair and reassembly are emphasized.

AUT-1529 Electrical and Electronic Systems I (3-3-4)
An introduction to the study of auto-electrical systems including batteries, starting systems, charging system and regulators as well as a study of principles of automotive microcomputer systems.

AUT-1530 Electrical and Electronic Systems II (4-12-8)
Continuation of AUT 1529. Diagnose and correct problems. Testing procedures for sensors, microcomputer and controlled devices.

BGM-1001 Housekeeping Maintenance (5-9-8)
Emphasis is placed on general floor care such as cleaning, stripping, waxing, and buffing. Carpet care is emphasized in addition to tile and special floor covering repair.

BGM-1002 Painting and Finishing Techniques (5-9-8)
Interior and exterior paints and protective coating are covered. Special attention is given to the nature of substrates, application procedures, and surface preparation.

BGM-1003 Building and Roofing Repairs (1-6-3)
Interior and exterior building repairs are covered. Emphasis is placed on the application of various roofing materials used for roofing repairs. General patchwork procedures are discussed in addition to the use of guttering and flashing.

BGM-1004 Groundskeeping (1-6-3)
Mowing procedures, shrubbery planting, pruning and general landscaping techniques are covered. Emphasis is placed on various fertilizers and chemical agents. Refuse control and parking lot conditions are included.

BIO-100 Basic Biology (5-0-5)
A generalized approach to the study of biological organisms, taught at a slow pace for those students with little or no background in biology. Topics include cellular theory, enzyme theory, and principles of classification of organisms.

BIO-101 General Biology (3-4-5)
An introduction to the study of living organisms, with an emphasis upon cellular theory. Topics include the structure and function of organelles, enzyme theory, and tissue, organ, and organ system levels of development.

BIO-102 Anatomy and Physiology I (4-2-5)
A study of the general anatomical plan of the body and eleven systems: integumentary, skeletal, muscular, digestive, respiratory, and circulatory. Designed so that the student will understand how the human body controls its function and provides for survival. Prerequisite: BIO 101.

BIO-104 Microbiology (3-2-4)
An introductory course dealing with the morphology and physiology of important bacteria, fungi and parasites. Emphasis will be placed on safety procedures, sterilization techniques, isolation and identification of microorganisms and preparation and use of culture media.

BIO-201 Botany (4-2-5)
An introduction to the plant kingdom covering the fundamental principles of reproduction, growth and development of plants as well as taxonomy. Labs to accompany lecture material.

BIO-205 Anatomy and Physiology II (4-2-5)
A more detailed study of the body systems, including fluid and electrolyte balance and their interdependence to total body functioning and homeostasis. Disruptions of normal function and signs and symptoms manifested by the pathology are discussed with each system. Classroom instruction and directed experiences in the on-campus lab are utilized. Prerequisite: BIO 102.

BIO-206 Anatomy and Physiology III (4-2-0-5)
The study of functions and structure of the human body is continued. Pathophysiological changes which bring about disruptions of normal physiology and the manner in which the systems of the body strive to maintain homeostasis are studied. Symptoms, signs and physical and laboratory findings are discussed in the classroom and lab setting. Prerequisite: BIO-205.

BUS-101 Introduction to Business (5-0-5)
A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management.

BUS-102 Typing I (2-3-3)
Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Speed and accuracy requirements: 30 words per minute for three minutes; maximum of three errors.

BUS-103 Typing II (2-3-3)

Introduction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Speed and accuracy requirements: 40 words per minute for five minutes; maximum of five errors. Prerequisite: BUS 102 or equivalent.

BUS-104 Typing III (2-3-3)

Emphasis on problems and speed building. Greater attention to development of production typing skills. Development of the student's ability to function as an expert typist, producing mailable copies, is stressed. Introduction to methods of duplication is also included. Speed and accuracy requirements: 50 words per minute for five minutes; maximum of five errors. Prerequisite: BUS 103.

BUS-105 Special Typing (2-3-3)

A course designed to develop typing skill in those students with physical handicaps. The requirements and methods vary depending on the degree and nature of the individual's infirmity.

BUS-106 Shorthand I (3-2-4)

A beginning course in the theory and practice reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, phrases and word beginnings and endings. Dictation rate of 40 words per minute required.

BUS-107 Shorthand II (3-2-4)

Continued theory study with greater emphasis on dictation and elementary transcription. Dictation rate of 60 words per minute required. Prerequisite: BUS 106 or equivalent.

BUS-108 Shorthand III (3-2-4)

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Dictation rate of 80 words per minute required. Prerequisite: BUS 107.

BUS-110 Office Machines (1-2-2)

Designed to teach students how to use electronic calculators in solving the kinds of problems found in business.

BUS-113 Keyboarding (1-2-2)

An introduction to the touch typewriting system. Emphasis on correct techniques, alphabetic, and numeric data entry and proofreading procedures. Minimum competency for speed is 25 words per minute.

BUS-115 Business Law (5-0-5)

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments and agencies.

BUS-120 Accounting I (4-3-5)

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: MAT 100 or equivalent placement test scores.

BUS-121 Accounting II (4-3-5)

Partnership and corporation accounting. Emphasis is placed on recording, summarizing, and interpreting data for management control rather than on skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: BUS 120.

BUS-122 Accounting III (4-3-5)

Study of long term liabilities and investments, analysis of financial statements, cost, budgets and flow of funds. Prerequisite: BUS 121.

BUS-124 Construction Methods and Materials (3-0-3)

This course is designed for the student enrolled in the real estate curriculum. The fundamentals of construction according to the type and quality of construction in buildings are given adequate consideration in both the classroom and at construction sites. An understanding of materials used, design, and site location are required of each student. Terminology used in construction, materials and methods must be demonstrated by the student in order to complete this course.

BUS-125 Principles of Bank Operations (3-0-3)

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his chosen profession in a broad (and operational) perspective. The descriptive

orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective necessary for career advancement.

BUS-127 Financial Management (3-2-4)

The major objectives center around revealing the significance of business finance and the role it plays in the production and distribution process. The course is presented from the viewpoint of the finance department of a firm and deals with the concepts and techniques used in making correct decisions on obtaining and using funds. Prerequisite: BUS 120.

BUS-131 Business Communications (3-2-4)

A communication course designed for business students who must learn to initiate written documents. Primary emphasis is placed upon the development of skills in the techniques of writing business letters, such as credit and collection, complaints, orders, acknowledgements, remittances, inquiries, application letters and data sheets. Prerequisite: ENG 102.

BUS-133 Governmental Accounting (3-2-4)

This course will cover accounting principles relating to governments including appropriations and allotments, encumbrances, and fund accounting. The course includes a study of various funds and the operations of these funds including General, Special, Debt Service Assessment, Trust Agency, Intragovernmental Service, Capital Projects, and Enterprise Funds. Also, included are the legal aspects of accounting both from the standpoint of the private accountant and governmental accountant. Prerequisite: BUS 120.

BUS-142 Installment Credit (3-0-3)

In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, serving the loan, and collecting the amounts due. Each phase of a bank 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 aspects of installment lending.

BUS-143 Savings and Time Deposit (3-0-3)

The course reflects recognition of the fact that a knowledge of the historical development of savings institutions and awareness of the basic economic functions of the savings processes are necessary to an understanding of the current operations and policies of these institutions. It 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.

BUS-144 Financial Principles (3-0-3)

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

BUS-152 Consumer Awareness (3-0-3)

Introduces the basic economic concepts of supply, demand, and substitutability. Using these concepts, students will study and discuss consumer laws, consumer credit, product safety and warranties, advertising and packaging appeals, and sources of consumer information, emphasizing avenues of recourse for consumer grievances.

BUS-201 Principles of Word Processing (3-0-3)

An introduction to Word Processing concepts, stressing comparison with traditional office techniques, elements, systems, and applications.

BUS-202 Word Processing Systems I (1-4-3)

This course is designed to train students in the basic and intermediate functions of the IBM Displaywriter text-editing/word processing system. Students learn to produce a variety of documents utilizing software, visual prompts, and diskette media. Experience with actual field problems will be provided for reinforcement. An advanced keyboarding skill which is transferable to data entry terminals and other displays is also developed. Prerequisite: Typing skill.

BUS-203 Word Processing Systems II (3-0-3)

This course is designed to train students in the advanced functions of the IBM Displaywriter text-editing/word processing system. Students will develop file design and management skills and learn advanced math functions utilizing the appropriate software, visual prompts, and diskette media. Prerequisite: BUS 202 on the same equipment.

BUS-205 Advanced Typing (2-3-3)

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and typing projects that closely approximate the work appropriate to the field of study. Some of the projects involve: correspondence, manuscripts, reports, tabulation, technical, legal, government, and medical typing problems. Speed and accuracy requirements: 60 words per minutes for five minutes; maximum of five errors. Prerequisite: BUS 104.

BUS-206 Dictation and Transcription I (3-2-4)

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Dictation rate of 120 words per minute required with resulting mailable transcripts. Prerequisite: BUS 108.

BUS-207 Dictation and Transcription II (3-2-4)

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Dictation rate of 120 words per minute required. Prerequisite: BUS 206.

BUS-208 Dictation and Transcription III (3-2-4)

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Dictation rate of 120 words per minute required with resulting mailable transcripts. Prerequisite: BUS 207.

BUS-209 Machine Transcription (2-0-2)

Training in the operation and applications of dictation/transcription equipment. Prerequisite: Typing skill.

BUS-214 Secretarial Procedures (3-2-4)

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. Some of these responsibilities include: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, and office organization. Prerequisite: BUS 205.

BUS-221 Payroll Accounting (2-2-3)

Emphasis on the methods of computing wages and salaries, the methods of keeping records, and the preparation of government reports.

BUS-222 Intermediate Accounting I (3-2-4)

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and retained earnings statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital. Prerequisite: BUS 122.

BUS-223 Intermediate Accounting II (3-2-4)

Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets, special analytical processes, and processing accounting data through use of a computer. Prerequisite: BUS 122.

BUS-225 Cost Accounting (3-2-4)

Nature and purposes of cost accounting, accounting for direct labor, materials, and factory overhead; job cost, process cost and standard cost principles and procedures; selling and distribution costs, budgets and executive use of cost figures. Prerequisite: BUS 122.

BUS-226 Introduction to Auditing (3-0-3)

An introductory study of the theories and practices of auditing, the generally accepted auditing standards, and the rules of professional conduct. Auditing techniques, the types of audits, audit opinions, internal auditing concepts, and procedures will be covered from the public accounting viewpoint. Prerequisite: BUS 121.

BUS-229 Income Taxes I (3-2-4)

Application of federal and state tax laws to individual tax situations with special emphasis on current tax law changes.

BUS-230 Analyzing Financial Statements (3-0-3)

This course is a study of the characteristics of financial statements and financial statement analysis. It serves as a useful review of basic

accounting principles for those students who have studied accounting as it covers goals, methods, and tools of analysis, analysis of profit and loss, accounts receivable, inventories, and balance sheet accounts to sales, and projected statements and cash budgets. Prerequisite: BUS 120.

BUS-231 Income Taxes II (2-3-4)
Application of federal and state tax laws to partnership and corporations with special emphasis on current tax law changes. Continuation of BUS 229 with practical experience.

BUS-232 Sales Development (3-2-4)
A study of retail, wholesale and specialty selling with emphasis placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

BUS-233 Current Trends in Business Management (3-2-4)
A course designed to develop the student's ability to keep up to date in his profession. Case studies and lectures centering around industrial and business periodicals are the major teaching techniques used. Prerequisite: All course requirements of the first three quarters or approval of the curriculum advisor.

BUS-237 Small Business Management (3-2-4)
Introduces the small business and its environment as a part of the overall business world. The creation and the management of the small business are explored in depth. Topics include the following: strengths and weaknesses of small business, salaried employment versus entrepreneurship, danger of small business failure, roads to ownership, selection of the legal firm of organization, franchising, obtaining capital, the management process, planning and tools for decision making, organizing, and staffing the organization, and financial and administrative control.

BUS-239 Marketing (5-0-5)
A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in such marketing process.

BUS-244 Retail Management (5-0-5)
A study of the operations of a retail firm including: merchandising, buying, selling, advertising, and related functions such as financial management.

BUS-248 Business Economics I (5-0-5)
The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution and consumption both in relation to the individual enterprise and to society at large.

BUS-249 Business Economics II (5-0-5)
Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems. Prerequisite: BUS 248.

BUS-256 Introduction to Commercial Lending (3-0-3)
This course provides the basic foundations for sound lending policies and procedures in the commercial lending area. As a parallel to the Installment Credit course, Commercial Lending completes the necessary background training for individuals aspiring to enter a career in banking and finance. Major topics covered include commercial lending overviews, the lending process, portfolio management, and regulations and business development. These topics are explored through the study of the commercial customer, the various types of commercial loans, the decision process, the regulatory and legal environment.

BUS-259 Managerial Planning (2-0-2)
This course is designed to familiarize students with the entire planning process as it relates to a small business and the entire business process. Emphasis will be placed on quality control, control of expenses, and profit goals, using the accounting cycle as a basis.

BUS-263 Statistical Quality Control (3-2-4)
Principles and techniques of quality control and cost saving. Organization and procedure for efficient quality control. Functions, responsibilities, structure, costs, reports, personnel and vendor-customer relationships in quality control. Sampling inspections, process control and tests for significance.

BUS-265 Work Measurement (3-2-4)
Principles of work simplification including administration of job methods improvement, motion study fundamentals and time study

techniques. Use of flow and process charts, multiple activity charts, operation charts, flow diagrams and methods evaluation.

BUS-266 Value Analysis (3-2-4)
The modern concept in the control of manufacturing production. This course will provide the students an opportunity to study a production system with the specific purpose of identifying unnecessary costs. The objective of the concepts and techniques of value analysis is to make possible a degree of effectiveness in identifying and removing unnecessary cost by the use of sound decisions through a common sense approach.

BUS-267 Production Control (3-2-4)
Day-to-day plant direction, forecasting, product planning and control scheduling, dispatching, routing, and inventory control.

BUS-268 Plant Layout (3-2-4)
A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Layouts for small and medium sized plants, layout fundamentals, selection of production equipment and materials handling equipment. Effective management of men, money and materials in a manufacturing operation.

BUS-269 Safety Engineering (3-2-4)
Management and supervisory responsibility for accident prevention, accident reports, machine guarding, personnel protective equipment, first aid, etc. The course centers around OSHA standards with practical exercises in their use and interpretation.

BUS-270 Industrial Management (5-0-5)
This course is an introduction to specialized industrial topics including value analysis, manufacturing cycles, production control, safety engineering, plant locations, layouts, machinery and equipment.

BUS-272 Principles of Supervision (5-0-5)
Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Topics include: principles of organization and management of personnel, procurement, placement, training, performance checking, labor relations, fringe benefits, and security.

BUS-273 Personnel Management (5-0-5)
Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, renumeration, labor relations, fringe benefits and security.

BUS-275 Land Use and Development (3-0-3)
This course deals with the analysis of property to determine its "best" use. Particular topics include the property survey, maps, plotting, boundary location, right of ways, easements and zoning laws, etc.

BUS-277 Credit and Collection (3-2-4)
This course presents fundamental principles and practices of credit and collection. Meaningful projects are included in order to provide a better understanding of credit principles, concepts, procedures, job activities and responsibility.

BUS-278 Money and Banking (3-2-4)
After successfully completing the course, the student will understand the operations of the banking system, will understand the role of commercial banks and the Federal Reserve, and will understand the application of fiscal policy and monetary policy in our economic system.

BUS-280 Federal Reserve System (3-0-3)
This course examines the operations and policies of the Federal Reserve System during the past sixty years. The origins, administrative structure, and crucial periods in the history of the System are reviewed. A treatment of international monetary relations following the end of World War II is also included. The course concludes with a review and analysis of monetary instruments and of the goals of monetary policy.

BUS-281 Bank Investments (3-0-3)
Because the bank's need 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 cyclinical 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.

BUS-283 International Banking (3-0-3)
An introduction to a vast field for those working in international departments as well as for those involved in the domestic activities of

their banks. The essential objective of this course is to present 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.

BUS-284 Bank Management (3-0-3)

This course presents new trends which have emerged in the philosophy and practice of management. Study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. Single case study is becoming well established as an effective management learning technique, this course also introduces the use of cases as a new element.

BUS-285 Real Estate Market Valuation (3-0-3)

This course consists of instruction in appraising real estate value. The importance of the appraisal process, terminology, the three approaches to value, the coorelation process, and the appraisal report are included. Also, practical in-field appraisal exercises constitute a major portion of this course.

BUS-286 Bank Cards (3-0-3)

This course presents an overview of the bank card industry with the dual objectives of helping the student understand the role of the bank card in the economy as well as the basic operational problems involved in the successful management of a bank card plan. Topics covered are the types of credit cards in use and their functions and histories, the cardholder's profile, attitudes and behavior, and credit-card operations-marketing, authorization, customer service, cost analysis and control, collection policies and procedures, security and fraud. This course also discusses the legal development affecting credit cards and the regulatory environment in which banks operate their card business.

BUS-287 Financing Business Enterprise (3-0-3)

The difference between lending and investing is emphasized. Stress is placed on the fact that investing in a corporation and financing a corporation are different aspects of the same subject.

BUS-288 Home Mortgage Lending (3-0-3)

This course 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, the mortgage plans and procedures, mortgage loan processing and servicing, and finally, the obligations of the mortgage loan officer in overall portfolio management.

BUS-289 Real Estate Law (4-0-4)

The course consists of instruction in the areas of contracts, and use controls, deeds, property ownership, cooperatives, and other legal aspects. In order to satisfactorily complete this course, students must attend a minimum of 80 percent of the class meetings and achieve a passing grade under the college's uniform grading system for college credit courses. Prerequisite: BUS 291 or North Carolina Salesman's License.

BUS-290 Real Estate Finance (3-0-3)

This course consists of instruction in the areas of financing arrangements, sources of financing, financing instruments, loans, mortgages, tax ramifications, etc. In order to satisfactorily complete this course, students must attend a minimum of 80 percent of the class meetings and achieve a passing grade under the school's uniform grading system for college credit courses. Prerequisite: BUS 291 or N.C. Salesman's License.

BUS-291 Fundamentals of Real Estate (6-0-6)

This course consists of instruction in fundamental real estate principles and practices, including real estate law, financing, brokerage, valuation and taxation. Also included is instruction on residential building construction, land use, the real estate market and the North Carolina Real Estate Licensing Board. Students must attend a minimum of 80 percent of the class meeetings and achieve a passing grade under the college's uniform grading system for college credit courses if this course is to be used to qualify for the N.C. Real Estate Salesman Exam. This course provides instruction in all the subject areas required for the salesman course and is a prerequisite for BUS 289 and BUS 290 and BUS 292 and qualifying to take N.C. Real Estate Brokers Examination.

BUS-292 Real Estate Brokerage Operations (3-0-3)

This course consists of basic instruction in the various aspects of real estate brokerage operations, including establishing a brokerage firm, management concepts and practices, personnel training, marketing operations, records and bookkeeping systems (including trust account

bookkeeping) and financial operations. Prerequisite: BUS 291 or N.C. Salesman's License.

BUS-293 Credit Administration (3-0-3)
This course directed toward the executive level concerns itself partly with a statement and 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.

BUS-294 Branch Management (3-0-3)
The objective of this course is to present a comprehensive overview of the branch function and the manager's role in its operation; it provides a complete introduction to the functional aspects of the branch management positions. This course emphasizes the marketing role of the branch manager.

BUS-296 Real Estate Ethics (3-0-3)
A course designed to focus on the ethical considerations involved in conducting business transactions. Emphasis on "Realtor" Code of Ethics, agency relationships and similar sources of materials dealing with the ethics question.

BUS-297 Real Estate Seminar (3-0-3)
A seminar on the problems of real estate brokerage opeations, basic business law, organizational form, financial problems, employer-employee relations, and otehr relations.

BUS-298 Real Estate Investments and Taxation (4-0-4)
An introductor course designed to take the student from the initial concepts of evaluation of real estate investments to an analysis of positive and negative cash flows that derive from these investments. Includes investments in general, risk and return, and the acquisition, ownership and disposition of real property.

BUS-299 Property Management (3-0-3)
A study of real estate as an investment. Included are selected topics such as leasing, maintenance, accounting and budgeting, tenant selection, and the influence of governmental policies on management and investments.

CAR-1000 Carpentry I (2-6-4)
An introduction to the construction industry, the care and use of hand and power tools, materials, and methods of construction and basic building layout. Types of foundations and methods of construction.

CAR-1012 Computers in Construction (1-3-2)
Methods and techniques of using computers in the building trades industry are covered. Topics include materials estimating, layout, and energy consumption.

CAR-1101 Principles of Carpentry (5-15-10)
A brief history of carpentry and present trends of the construction industry. The course will involve operation, care and safe use of carpenter's hand tools and power tools in cutting, shaping and joining construction materials. Major topics of study will include theoretical and practical applications involving materials and methods of construction, building layout, preparation of site, footings and foundation wall construction including form construction and erection.

CAR-1103 Carpentry: Framing (5-15-10)
A thorough introduction to the principles and practices of frame construction including sills, floor joist, sub-floor, wall faming, ceilings, rafters, bridging, sheathing, partitions, and roof construction. Coordination with other skills will be stressed.

CAR-1104 Carpentry: Finishing (5-15-10)
Methods and techniques of interior and exterior finishing will be covered including baseboards, door and window trim, stairways, door and window hanging, hardware, exterior trim, and built-ins. Emphasis will be on quality work.

CAR-1106 Millwork and Cabinetmaking (5-15-10)
Cabinetmaking and millwork as performed by the general carpenter for building construction. Use of shop tools and equipment will be emphasized in learning methods of construction of millwork and cabinetry. Practical applications will include measuring, layout and construction of base and wall cabinets, built-ins, arches and stairs. Materials and finishes are also covered.

CAT-101 Advertising Principles (3-0-3)
A comprehensive survey of the history and development of advertising including a discussion of its economic and social values. An introduction to advertising media and current publications in the field.

CAT-102 Art and Design (2-6-4)
Problems in basic design, basic drawing techniques, relationships of materials and techniques to form. Emphasis on the creative process.

CAT-105 Basic Drawing (2-3-3)
Basic drawing in various wet and dry media with emphasis on overcoming symbolizing with exercises designed to cause shifting to the right hemisphere of the brain which controls seeing and recording. Contour lines, negative space, proportion and value are stressed. Subject matter includes still-lifes, landscapes, portraits, and masters' drawings.

CAT-106 Life Study (0-6-2)
Basic drawing from live models and film strips. Exercises include blind contours, modified contours, gestures and finished realistic drawings of subjects ranging from pets and unusual animals to individuals for full figure and portrait work. Various drawing techniques using graphite pencil, colored pencils, ink and wash are studied. Prerequisite: CAT 105.

CAT-110 General Illustration (2-6-4)
Study of creative methods and rendering techniques used in the illustration field. Editorial illustration, advertising spots, cartooning, fashion and retail product. Black and white and color problems will be assigned, using various media and materials. Emphasis on good drawing and research.

CAT-116 Photography I (2-6-4)
An introduction to the field of photography, photographic equipment and materials. A study of the fundamental techniques of the camera and its expressive possibilities in relation to the field of design and visual communication. Assigned camera projects, darkroom procedures and equipment.

CAT-117 Photography II (2-3-3)
Advanced photographic techniques and materials. Participation in studio and laboratory procedures illustrating various applications and creative possibilities of photography. Applied problems using the 35mm, copy and twin lens reflex cameras. Prerequisite: CAT 116.

CAT-121 Commercial Art Fundamentals (4-6-6)
An introduction to the communication design field. How to communicate with others in a clear and concise manner. Emphasis on applied problems and frequent critiques.

CAT-122 Typographic Design (4-6-6)
Through reading, discussion and a series of design projects,the student will gain a working knowledge of the basics of typography, calligraphy, color, type specification, and type comprehensives. Prerequisite: CAT 121, 102; DFT 101.

CAT-123 Layout and Design (4-6-6)
Professional approach to advertising and editorial layout. The indicating of finished art concepts, visuals, and ideals. Pencil roughs, colored sketches and comprehensive layouts. Prerequisites: CAT 122, DFT 102.

CAT-201 Art History (3-0-3)
Through lecture, personal observation, discussion, readings and the viewing of slides, the student will gain an understanding and appreciation of art in a historical context, where artists stand now, and how we arrived at this point. Emphasis on the formal, emotional and intellectual aspects.

CAT-206 Project Seminar I (2-3-3)
Each student selects and pursues project work in the field of his choice. Maximum individual attention is available.

CAT-212 Industrial Art and Design (2-6-4)
A study of art and design for industry and business. Forms, charts and graphs, letterhead, trademarks and company publications. Use of the air brush, photo retouching and airbrush art. Handling of annual reports. Prerequisite: CAT 123.

CAT-217 Silk Screen Techniques (1-6-3)
Commercial approach to silk screen printing. Applied problems using paper, tusche and glue, lacquer, film, aquafilm, and photographic film methods. Problems in multicolor printing.

CAT-224 Art Production (4-6-6)
A thorough background in production methods for various media. Study of printing and engraving processes. Color separation process. Assignments in art mechanicals, reproduction methods and printing paper qualities and selection. Trips to printing, engraving, and paper plants.

CAT-225 Commercial Art and Advertising Design (4-6-6)
A course providing simulated professional working conditions. The student will utilize all previous instruction "job assignments." Work will start the student's individual portfolio or professional samples. There will be class critique and discussions of assignments and solutions. Prerequisite: CAT 123.

CAT-226 Commercial Art and Advertising Design (Advanced) (4-6-6)
Course providing simulated professional working conditions. Advanced "job" problems. Emphasis on self-expression and originality. The student will complete his professional portfolio. Prerequisite: CAT 225.

CAT-231 Project Seminar II (2-3-3)
Each student selects and pursues project work in the field of his choice. Maximum individual attention is available.

CAT-232 Project Seminar III (1-6-3)
Individual attention is given each student in the areas of learning which need strengthening. Project development is stressed. Prerequisite: CAT 225.

CAT-234 Portfolio and Resume Development (5-0-5)
Production of an individualized resume and portfolio. Review of the current job market. Emphasis on the interview process and the presentation of the portfolio.

CAT-236 Advertising Concepts and Campaigns (3-3-4)
Research and analysis of visual communication problems. Individualized students and creative terms conceptualize themes and campaigns for print and television. Emphasis on advertising that is innovative not merely imitative. The "Total Concept": thumbnail sketch through working mechanical. Prerequisite: CAT 123.

CHM-100 Basic Chemistry (5-0-5)
Introduction to atomic structure, stoichiometry, chemical bonding, and properties of solutions. This course is designed for students with little or no background in Chemistry.

CHM-101 Chemistry I (3-4-5)
Study of the physical and chemical properties of substances, atomic structure, bonding, stoichiometry, gas laws, preparations and properties of solutions. Laboratory experiences parallel lecture topics.

CHM-102 Chemistry II (3-4-5)
Continuation of Chemistry I; qualitative analysis, organic chemistry and environmental chemistry. Laboratory experience to accompany lecture. Prerequisite: CHM 101.

CIV-100 Boundary Control (5-0-5)
The course covers the legal principles of boundary control to acquaint the student with the correct interpretations of deed description.

CIV-101 Surveying I (1-2-6-4)
Care and use of instruments, theory and practice of plane surveying including taping differential and profile leveling, transit, stadia, and transit-tape surveys.

CIV-102 Surveying II (1-2-6-4)
Triangulation of ordinary precision, use of plane table, calculation of areas of land, land surveying, topographic surveys and mapping.

CIV-103 Surveying III (1-2-6-4)
Route surveys by ground and aerial methods, simple, compound, reverse parabolic and spiral curve; geometric design of highways, highway surveys and plans including mass diagrams.

CIV-109 Surveying Law (4-0-4)
The study of the North Carolina State Statutes regarding the practice of surveying, study of conflicting elements in establishment of boundaries, riparian rights, adverse possession, preparation of abstracts, and laws affecting the drainage of land from the viewpoint of both existing and proposed channels.

CIV-114 Statics (4-0-4)
Forces, resultants, and types of force systems; moments, equilibrium of coplanar forces by analytical and graphic methods; stresses and reactions in simple structures; equilibrium of forces in space, static and kinetic friction; center of gravity, centroids, and moments of inertia.

CIV-121 Computations I (4-0-4)
An introductory course in mathematics which is a prerequisite to math for surveyors.

CIV-211 Topographic Surveying (1-2-6-4)
The practice of methods of making topographic surveys with conventional instruments to include the plane table. The use of

photography for mapping purposes. The production of photo-maps, and the methods of ground control in aerial surveys. Applied field problems are included.

CIV-212 Route Surveying (2-6-4)
Advanced study in the laying out of railroads, highways, and canals with a concentration in grade and slope staking, spiral curves, and super-elevation. Applied field problems will be laid out.

CIV-213 Advanced Land Surveying (3-3-4)
Theories and practice of land surveying including sub-divisions, the use of the North Carolina Coordinate System, Triangulation, trilateration, and astronomic observations. There will be extensive use of the electronic distance device and precision theodolities. There will be night labs in this course and attendance is mandatory.

CIV-214 Mapping and Subdivision Planning (2-6-4)
Mapping principles and their applications in producing topographic, land, hydrographic, and photographic maps and their use in subdivision planning. Field trips will be made to various subdivision sites and to city and county planning offices.

CIV-217 Construction Methods and Equipment (3-0-3)
Excavating methods and equipment used in building and highway construction; pile driving; construction techniques and equipment used in reinforced concrete buildings, bridges, lift-slabs, thin-shells and folded plates, erection methods and equipment of structural steel buildings and bridges; carpentry in house and heavy timber construction; construction safety. Field inspection trips.

CIV-223 Codes, Contracts and Specifications (2-0-2)
Basic principles and methods most significant in contract relationships appreciation of the legal considerations in construction work; study of the National Building Code and local building codes, interpreting and outlining specification.

CIV-226 Properties of Highway Materials (3-2-4)
Study of the various building materials used in highway construction. Covers soil types and classification; soil stabilization; groundwater and frost action; compaction.

CIV-227 Construction of Roads and Pavements (2-3-3)
Construction practices for various types of road building, including soil properties, grading, subgrading, base courses, drainage, embankments, compaction, and formwork. Design, construction, and testing of rigid Portland-cement concrete and flexible bituminous pavements. Field inspection trips.

CIV-228 Introduction to Drainage (2-3-3)
Introduction to the basic principles of hydraulics and hydrology necessary to the understanding of the disposal to runoff. Topics include rainfall and runoff; basic fluid flow; closed and open channels; and flow through orifices and weirs. Laboratory work includes preparation of drawings of drainage structures and field trips.

CIV-229 Highway Drainage (2-3-3)
A continuation of principles of drainage with special emphasis on the surface drainage of streets, roads, and highways. Topics include culverts; median swales; curb and gutter feains; inlets; and debris control. Laboratory work includes preparation of drawings of highway drainage structures.

CIV-230 Subdivision Drainage (2-3-3)
The principles of drainage and hydrology as applied to the removal of unwanted surface and subsurface water. Particular attention to the problem of urban storm drainage; storm sewers; and sewer appurtenances. Laboratory work consists of developing a drainage plan for a small subdivision.

CIV-1120 Building Trades Instruments (1-3-2)
Use and care of instruments, measurement of distances and angles, leveling, recording, field notes, establishing lines and grades, cross sections and volumes.

CJC-101 Introduction to Criminal Justice (5-0-5)
A general course designed to familiarize the student with the philosophy and history of law enforcement, courts, and corrections in a democratic society; a survey of the primary duties, responsibilities, and limitations of the criminal justice practitioners.

CJC-102 Criminal Justice Communications (5-0-5)
A course designed to improve interpersonal communication skills of criminal justice personnel. Emphasis is placed on developing skills in reflective listening, assertion, and conflict management.

CJC-103 Constitutional Law (5-0-5)

Review of the U.S. Constitution for the historical development of the amendments that apply directly to the criminal justice system. Review of the landmark cases which have had a direct impact upon the administration of the criminal justice system.

CJC-104 Investigative Photography (1-4-3)

An introduction to the field of photography. A study of the fundamental techniques of the camera and its role in the investigative process. Assigned photo project within the field of investigation, use of the darkroom and preparation of a complete photo case for court presentation.

CJC-105 Criminology (5-0-5)

The student of deviant behavior as it relates to the definition of crime, ecology and crime, theories of crime causation, and crime typologies, as well as society's reaction to criminal behavior.

CJC-106 Criminal Law (5-0-5)

Historical development and philosophy of law, including definitions and classifications of crime and their application to the administration of justice. Case law, legal research, methodology, and the concept of law as a social force combined with an overview of criminal statutes. Presents the rationale for various legal defenses.

CJC-108 Criminal Justice Field Training (0-20-2)

Provide supervised observation and participation in uniformed patrol duty, investigation, communication, records, corrections and crime laboratory work. This course is designed for the career student to bridge the gap between theory and practice, and requires a twenty hour minimum field work experience. Enrollment by special permission of instructor.

CJC-109 Introduction to Corrections (3-0-3)

A study of the history of philosophy of American corrections. Includes an introduction and overview of fundamental processes, trends, and practices of probation, institutions, parole, and community-based corrections. The legal rights of prisoners are discussed. Also discussed are current issues and problems in corrections.

CJC-110 Community Based Correction (3-0-3)

A study of how community resources can be utilized in the correctional process. The structure, functions and effectiveness of community corrections are examined.

CJC-111 Counseling Techniques (1-4-3)

Theories and techniques of counseling as applied to a correctional setting. Rudimentary skills are practiced in one-to-one role playing, and demonstrations to prepare the student for practice in the field are required.

CJC-112 Health and Wellness (1-4-3)

A course designed to present to the student prudent health living. It will include a health screening to develop awareness for physical fitness. Introduces the student to the need for proper and adequate nutrition. It allows each student an opportunity to develop his own personal fitness prescription. To emphasize prudent heart living CPR is presented. To develop the necessary life saving skills first responder is included.

CJC-201 Ethics and Community Relations (5-0-5)

Exposure to ethical considerations of criminal justice personnel from philosophical perspective. Problems related to dealing with victims, witnesses, suspects, and citizens.

CJC-202 Criminal Investigation (1-4-3)

This course introduces the student to the criminal investigation function; crime scene search; recording, collection, and preservation of evidence; sources of information; interview and interrogation; case preparation and court presentation.

CJC-203 Interviewing (1-4-3)

The various sources of information available to law enforcement agencies and techniques used in interviewing and interrogating victims, witnesses, and suspects.

CJC-204 Criminalistics (1-4-3)

To present the value of obtaining physical evidence to link an individual to a crime scene. The explanation of the capabilities of forensics to the identification of specifics. Preparation of evidence through mock situations. Presentation of scientific instrumentations and their capabilities.

CJC-205 Special Topics Seminar (1-4-3)

A seminar format is utilized to examine current topics of interest to criminal justice practitioners.

CJC-206 Substance Abuse (5-0-5)

Introduction to the problems of substance abuse (alcohol and drugs) in our society. This course is designed to equip the criminal justice student with increased knowledge concerning the issues involved, i.e. history and classification of substances subject to abuse, social impact of abuse, physical and psychological impact of abuse, statutory and regulatory law controlling abuse, and treatment modalities for abuse.

CJC-207 Juvenile Delinquency (5-0-5)

A study of the evolution of the juvenile courts in the United States, the juvenile justice process, and the criminal justice system's role in juvenile delinquency prevention and correction.

CJC-208 Judicial Process (5-0-5)

This course is designed to familiarize the criminal justice student with the judicial process including arrest, preliminary hearings, trial courts, state and appellate process, and the legal records of the process.

CJC-209 Criminal Evidence and Procedure (1-4-3)

Constitutional and procedural considerations affecting arrest, search and seizure, post-conviction treatment; origin, development, philosophy, constitutional basis of evidence; kinds and degrees of evidence, rules governing admissibility; judicial decisions interpreting individual rights and case studies; focus upon the case study approach. Major topics covered in this course include: the application of the Bill of Rights; the exclusionary rule; police participation in criminal conduct; arrest, search and seizure; interrogations and confessions; eye witness identification procedures; rights of convicted offenders; evidence as a concept; and a comparative evaluation of the American legal system.

CJC-210 Organizational Theory and Behavior (5-0-5)

This course is designed to equip the criminal justice student with an understanding of organization functions, structures, processes, and behavior and the manifestation of these phenomena in the criminal justice system.

CJC-211 Vehicle Accident Investigation (1-4-3)

Instruction methods in procedures and reports applicable to traffic accidents. Particular emphasis will be on the interviewing of drivers and witnesses, as well as photography, measurements, and diagrams.

CJC-212 Confinement Facility Administration (3-0-3)

The structure, functions, and effectiveness of institutional corrections are considered. Programs at selected prisons are studied. Custodial, classification, reception, orientation, and release procedures are reviewed.

CJC-213 Law Enforcement Operations (1-4-3)

Problems of police organization and management; the allocation of police resources; information systems; community-relations concerns; determinants of police policy. Major topics covered in this course include: decision-making, context of police administration; staff administrations; evaluation of police programs; relation of personnel to policy; and specific programming consideration.

CJC-214 Criminal Justice Planning (3-0-3)

A course designed to familiarize the student with the planning process as it applies to the criminal justice system. Topics include history of criminal justice planning, problem identification and clarification. Problem-solving techniques, implementation, evaluation and identification and utilization of various criminal justice reference materials.

COE-101 Cooperative Work Experience (0-10-1)
COE-102 Cooperative Work Experience (0-20-2)
COE-103 Cooperative Work Experience (0-30-3)

Stresses part-time work in a job related to students' degree program with a college approved employer. Credit ratio not to exceed 1:10 hours. May repeat for credit. Prerequisite: Approval of advisor and co-op coordinator.

COS-1001 Scientific Study (5-0-5)

An introduction to the field of cosmetology. Subjects covered include professional ethics, grooming, hygiene and personality development, sterilization, sanitation, first aid and bacteriology, cosmetology law, anatomy, chemistry, nails, hair, scalp and skin disorder.

COS-1002 Scientific Study (5-0-5)

Theory of skin, scalp, hair, nails and disorders, salesmanship, permanent waving, croquinole and chemical hair relaxing, hairdressing and wig styling, hair coloring.

COS-1003 Scientific Study (5-0-5)

Theory of anatomy, manicuring, chemistry of cosmetics and facials, hair styling, massage scalp treatment, superfluous hair removal and grooming and hygiene.

COS-1004 Scientific Study (5-0-5)
Theory of skin, scalp, hair, nails and disorders, salesmanship, permanent wave styling, beauty salon management, electricity, hair shaping, chemistry, sanitation and sterilization, cold waving.

COS-1005 Theory Review (5-0-5)
General review of the material required by the N.C. State Board of Cosmetic Art in preparation for the license exam.

COS-1011 Clinical Applications (0-24-8)
An introduction to the practice of fingerwaving, pin curling, rollers, marcelling and hair relaxing, shampooing, and rinses, scalp treatment, hair shaping, permanent waving, hairdressing and combing, hair tinting, bleaching, frosting and streaking, and the care and styling of wigs.

COS-1022 Clinical Applications (0-24-8)
An introduction to actual clinical practice covering bacteriology, pin curling, finger waving and roller, permanent waving, hair styling and wigs, manicuring and pedicuring, skin and scalp disorders, coloring, shaping.

COS-1033 Clinical Applications (0-24-8)
Shop practice in hair shaping, professional ethics, manicuring, cosmetics and facials, hairstyling, cold waving, hair coloring and scalp treatment.

COS-1044 Clinical Applications (0-24-8)
Advanced shop techniques in hair coloring and lash and brow tinting, artistry in hairstyling wigs, cold waving, hair shaping, sterilization, sanitation and chemistry.

COS-1055 Clinical Applications (0-24-8)
A continuation of COS 1044.

COS-1511 Clinical Applications (0-15-5)
An introduction to the practice of fingerwaving, pin curling, rollers, marcelling and hair relaxing, shampooing and rinses, scalp treatment and hair shaping.

COS-1512 Clinical Applications (0-15-5)
An introduction to the practice of permanent waving, hairdressing, combing, hair tinting, bleaching, frosting and streaking, in addition to the care and styling of wigs. Prerequisite: COS 1511.

COS-1513 Clinical Applications (0-15-5)
An introduction to the actual clinical practice covering bacteriology, pin curling, finger waving and hair rolling.

COS-1514 Clinical Applications (0-15-5)
An introduction to the actual clinical practice covering permanent waving, hairstyling and wigs, manicuring and pedicuring, skin and scalp disorders, coloring, and shaping.

COS-1515 Clinical Applications (0-15-5)
Shop practice in professional ethics, manicuring, cosmetics and facials.

COS-1516 Clinical Applications (0-15-5)
Shop practice in hairstyling, cold waving, hair coloring and scalp treatment.

COS-1517 Clinical Applications (0-15-5)
Advanced shop techniques in hair coloring, lash and eyebrow tinting, and artistry in hairstyling wigs.

COS-1518 Clinical Applications (0-12-4)
Advanced shop techniques in cold waving, hair shaping, sterilization, sanitation, and chemistry.

DAT-100 Introduction to Drug and Alcohol Studies (4-2-5)
A historical overview of alcoholism and drug addiction in western counties. Areas of emphasis include physiological effects, the addiction process, and the service delivery system.

DAT-102 Contemporary Social Problems (5-0-5)
A study of the nature and extent of major social problems of contemporary society, with emphasis given to such problems as family disorganization, crime and delinquence, minority groups, drug and alcohol abuse and addiction, industrialization and urbanization.

DAT-110 Pathophysiological Effects of Drugs and Alcohol (3-0-3)
Study of the pathophysiological effect (dysfunction) of alcohol and drugs on the human body. Emphasis on human body responses to opiates, cocaines, cannabis, amphetamines, barbiturates, hallucinogens, deleriants and alcohol. Additional topics may include signs and symptoms of abuse, identification, drug abuse in public education and problems of abuse.

DAT-116 Substance Abuse (3-0-3)

The major focus of this course will be skill building in the areas of communication, stress management, responsible assertion and decision making. The overall intent is the development of those skills that provide alternatives to alcohol and other drug use/abuse and the development of those skills that lead to helping others avoid problems with alcohol and other drugs.

DAT-120 Interviewing and Counseling I (5-0-5)

Basic counseling practice and theory in relationship to addiction and recovery.

DAT-121 Interviewing and Counseling II (5-0-5)

A practicum type setting is used to further the already acquired skills. Theories and practices of previous courses will be augmented for more indepth study and practice. Prerequisite: DAT 120.

DAT-122 Interviewing and Counseling III (5-0-5)

A continuation of DAT 121. Prerequisite: DAT 121.

DAT-124 Health Care Skills (1-6-4)

Focuses on procedures and practices commonly used to meet the needs of persons. Emphasizes principles and techniques underlying good patient care. Skill development will include management of medical emergencies such as preventive intervention techniques, cardiopulmonary resuscitation and clinical practice in basic health care skills.

DAT-126 Crisis Intervention (3-4-5)

Introduction to Alcoholics Anonymous's 12 STEP intervention of the alcoholic in theory and practice. Students will study the 12 STEPs in relation to their own lives. The course will also touch on planned intervention into the family of an addict.

DAT-130 Human and Social Services (3-0-3)

This course is designed to introduce the student to those institutions, public and private, which perform designated human and social service functions in society. Agencies may include those whose primary function is financial assistance, corrections, mental health services, family counseling and child welfare services. Examination is made of social interventive methods utilized to solve social problems.

DAT-200 Techniques of Drug and Alcohol Education (5-3-6)

Techniques of designing, conducting and evaluating drug and alcohol education progams for private and public groups and agencies, including schools, churches, clubs, parent groups, and businesses, DUI classes, and clients. The course focuses on three levels of education — prevention: primary (not yet using substances); secondary (uses substances and may experience minor problems); and teritiary (abuses substances and experiences problems). Emphasis is on attitude change through presentation of information.

DAT-202 Behavior Modification (5-0-5)

An introduction to the underlying assumptions, basic principles and techniques involved in behavior modification. A critical examination of behavior modification applied to various populations and across a wide range of conditions will be conducted in the course. Application of behavior modification principles and techniques is a necessary requisite of the course. Prerequisite: PSY 102.

DAT-220 Counseling and Rehabilitating the Chemically Dependent (4-3-5)

Study of theory and practice in group methods enhancing task and maintenance functions. Skills in problem solving, conflict resolution, brainstorming, and topic expansion will help the counselor help the addict in a practical and human way to a quality sobriety.

DAT-225 Drug and Alcohol Seminar (3-0-3)

A seminar to intensively study and present topics of special interest and to demonstrate knowledge and skill competency in preparation of educational materials and teaching individuals and groups. Legal aspects and professional ethics will be included.

DAT-230 Drug and Alcohol Internship (0-20-2)

Students would be required to spend at least 200 hours as interns in substance abuse services. This course provides advanced training in all aspects of professional practice as encountered in the working shop.

DFT-101 Technical Drafting I (0-6-2)

A study of basic principles, practices, and conventions of engineering graphics. Starting with freehand sketching the course will progress through formal isometric and orthographic projection. The course will emphasize, sketching, basic drafting skills, isometric and orthographic

drawing. The course will conclude with an introduction to schematic drawing.

DFT-102 Technical Drafting II (0-6-2)

The 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 graphic analysis to space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and working drawings. Approval by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometric objects. Prerequisite: DFT 101.

DFT-105 Surveying Drafting (4-4-6)

Instruction is given in the selection, use and care of instruments, single stroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double oblique auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices.

DFT-106 Civil Drafting (2-6-4)

Introduction to drawing associated with surveying technology. Topics covered include: preparation of real estate plots as required for deed registration, topographic maps, contours, highway plans and profiles, and earthwork.

DFT-110 Blueprint Reading: Instrumentation (0-3-1)

Each student is expected to develop the ability to recognize and draw all basic electrical schematic symbols. Skills in reading wiring blueprints are emphasized.

DFT-1104 Blueprint Reading: Machinist I (1-2-2)

Interpretation and Reading of Blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

DFT-1105 Blueprint Reading and Sketching (1-2-2)

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketches as a means of passing on ideas, information, and processes. Prerequisite: DFT 1104.

DFT-1106 Blueprint Reading: Machinist II (1-2-2)

Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction, and assembly. Prerequisite: DFT 1105.

DFT-1109 Blueprint Reading: Electrical (2-2-3)

Each student is expected to develop the ability to recognize and draw all basic electrical schematic symbols and to be able to associate these with the implied hardware. Skills in reading wiring blueprints are emphasized along with the associated skills of extracting material lists from blueprints needed to wire the structure involved. Some sketching and specification writing problems are used to tie the reading skills back to local and National Electrical Code requirements.

DFT-1110 Blueprint Reading: Building Trades (1-3-2)

Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT-1115 Blueprint Reading: Plumbing Trades (3-0-3)

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

DFT-1120 Template Development and Pipe Layout (3-3-4)

A study of the methods used in layout of sheet steel. Emphasis is placed on developing pipe and angle layouts by the use of patterns and techniques.

DFT-1121 Blueprint Reading for Welders (3-0-3)
A thorough study of trade drawings in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations and specifications will be emphasized.

DFT-1122 Blueprint Reading and Sketching: Mechanical (1-3-2)
Reading, interpreting and sketching mechanical details and assembly drawings used in piping systems that are installed in the construction industries such as Nuclear Power Houses, Shopbuilding, Plumbing, Heating and Ventilating systems.

DFT-1131 Drafting: Building Trades (1-3-2)
Selection and use of tools, lettering, geometric construction, orthographic projection, pictorial representation, sections and construction details.

DFT-1135 Design Techniques (CAD) (3-2-4)
An introduction and familiarization with the basic techniques of computer assisted drafting and computer aided manufacturing.

DVS-070 Basic Reading I (0-5-2)
DVS-071 Reading Skills I (0-5-2)
DVS-072 Reading Skills II (0-5-2)
Basic word recognition, literal comprehension skills, vocabulary development through context. The student progresses at his own pace through increasing levels of difficulty in an individual laboratory setting.

ECO-110 Contemporary Economic Institutions (5-0-5)
Economics under capitalism, socialism, communism, fascism; organization or production, government, agriculture, decision-making; distribution of income; problems of underdeveloped nations.

ECO-201 Cost Benefit Analysis of Alternate Energy Systems (2-0-2)
General procedure for estimating costs; estimation of costs for alternate energy systems; comparison of short-term costs and long-term benefits for alternate energy systems; analysis of payback period, cash flow, return on investment, and unit cost of alternate energy. Prerequisite: EGY 106, EGY 107 and EGY 205.

EDP-100 Selected Topics in Data Processing (0-2-1)
Course content varies as special interests of narrow scope are explored on an elementary level.

EDP-102 Computer Literacy for Beginners (1-2-2)
The novice learns the vocabulary of computers, the basic structure of a computer system, computer applications in a wide variety of fields and investigates controversial issues in computer usage. He participates in hands-on laboratory exercises to become a confident computer user.

EDP-104 Introduction to Data Processing (3-2-4)
A survey of hardware and software concepts, vocabulary, and applications. Sample topics include components and functions of a computer system, data organization, communications, careers in data processing. Laboratory experiences include sessions in application packages, spreadsheets, data management, and word processing.

EDP-105 Special Topics in Computer Operations (1-2-2)
Student and instructor will select a topic not otherwise covered in the regular curriculum. A program of study will then be designated by the instructor.

EDP-106 BASIC Programming (2-2-3)
An introduction to digital computing techniques, problem analysis, and program development using the BASIC language. Topics include various input/output methods, decision points and branching, loops, arrays, and sequential files.

EDP-107 Data Management in Small Business (3-2-4)
The student learns organization, storage, and retrieval techniques by utilizing spreadsheet and data management software packages.

EDP-108 Introduction to Programming (4-3-5)
An introduction to computer programming: algorithm development, input and output, branching and looping, arrays, menus, subroutines, string manipulation, sequential and random access files, introductory graphics. (May be replaced by both EDP 106 and EDP 110.)

EDP-110 BASIC Programming II (2-4-4)
A continuation of EDP 106, this course examines more complex problems and the more advanced techniques appropriate for those applications. Topics include random access files, subroutines and functions, use of graphics, and an introduction of the concept of structured programming. Prerequisite: EDP 106 or equivalent experience.

EDP-112 Microcomputer Word Processing and Office Automation (1-2-2)

An introduction to word processors, spreadsheets, and databases for PC's and ways of combining these tools to solve some of the clerical problems commonly encountered in small business.

EDP-115 Computer Graphics (3-2-4)

Screen Computer graphics appropriate for most graphical applications, points and lines, two and three dimensional pictures and their transformations, plane and space curves, surfaces. Utilizes specialized graphics packages; no programming experience required.

EDP-200 Operations Lab (0-5-2)

Provides experience in the daily activities of a computer center; operating the console, managing peripherals, keeping records. Consent of the Computer Center Director is required.

EDP-201 Individual Programming Project (1-2-2)

Supervised independent study and development of a programming project of special interest to the student. Prerequisite: One high level language EDP 108 or above.

EDP-202 Assembly Language and Programming (4-3-5)

A study of addressing techniques, symbolic, coding, internal representation, and assembler systems. Prerequisite: One high level language course (EDP 100, 210, 211, or 214) or equivalent experience.

EDP-204 Computer Graphics Design (3-3-4)

Programming techniques for screen design. Applications include graphs and charts, geometric shapes, and animation. Prerequisite: EDP 108. (This course differs from EDP 115 in its approach to graphics. EDP 115 utilizes graphics packages; it is primarily a user course. EDP 204 will emphasize the programming necessary to produce the graphics.)

EDP-205 Computerized Accounting (2-3-3)

The student will be able to process accounting data through use of the computer. Emphasis is on (1) analyzing transactions, (2) recording transactions on coding forms designed for special and general journals, (3) transferring transactions from coding form to input media and (4) processing the transaction using the microcomputer. Prerequisite: BUS 140 or BUS 120 or equivalent experience.

EDP-206 Operating Systems (3-2-4)

A survey of operating systems tasks: memory management (including virtual memory), I/O control, interrupts, device allocation, scheduling, priority handling. Laboratory experiences include applications on both microcomputers and minicomputers.

EDP-208 RPG II (3-3-4)

A problem oriented approach to programming with a high level fixed logic business language.

EDP-210 FORTRAN Programming (2-4-4)

Introduces the student to computer programming logic and symbolic language. Emphasis on flowcharting and program construction.

EDP-211 PASCAL (4-3-5)

A study of programming techniques in a highly structured language with emphasis on top-down design and modular organization. Unique features include user-defined variable types, case structure, sets, pointer variables, and dynamic data structures.

EDP-212 Trends and Issues in Data Processing (3-0-3)

The student will research topics of current interest in the field. Prerequisite: EDP 206 and EDP 218.

EDP-214 COBOL Programming I (4-3-5)

Structured programming in this common business language.

EDP-215 COBOL Programming II (4-3-5)

Advanced techniques in file maintenance and subroutines. Prerequisite: EDP 214.

EDP-216 Integrated Applications Development I (3-3-4)

The student will use spreadsheets, databases, and other development tools to develop a small business system in detail.

EDP-217 Supervised Work Experience (0-20-2)

The student puts his data processing skills into practice in the work environment. Consent of the curriculum advisor is required.

EDP-218 Database Programming (3-0-3)

Introduction to relational database design concepts and applications design for small business using a common personal computer database package.

EDP-219 System Analysis and Design (5-0-5)
Techniques for analyzing and designing business systems: record layout and file organization, document design, hardware and media selection, use of various kinds of charts and graphs, writing system proposals. Prerequisite: EDP 108, EDP 211, or EDP 214.

EDP-220 Structured Testing and Documentation (3-3-4)
Provides experience in rigorous testing and debugging procedures. The student will produce a complete documentation package for programmers, users, and operators. Prerequisite: EDP 219, and EDP 215.

EDP-221 Integrated Applications Development II (3-3-4)
A continuation of EDP 216. Prerequisite: EDP 216 or by permission of the instructor.

EDT-101 Orientation to Electrodiagnostics (3-0-3)
A general orientation to the hospital setting, in particular to departments which perform bioelectrical monitoring. The student is introduced to the topics of patient monitoring, infection control, and confidentiality.

EDT-102 Management of Medical Emergencies (2-2-3)
The student will be instructed in cardiopulmonary resuscitation, management of seizures, and other common emergencies encountered in an EKG and EEG laboratory or during bedside recordings.

EDT-103 Neurophysiology (4-2-5)
This course concentrates on the physiology of the nervous system, with an emphasis on brain function and bioelectricity of the nervous system. Prerequisite: BIO 102.

EDT-104 Principles of Neurotransmission (4-2-5)
An intensive study of bioelectricity of the central nervous system with labs consisting of EEG monitoring and data collection. Prerequisite: BIO 102, EDT 101.

EDT-105 Electrodiagnostics Seminar (4-0-4)
This course covers topics in electrodiagnostics, such as state of the art developments in the field of bioelectrical monitoring.

EDT-107 Laboratory Management (2-0-2)
A course designed to provide the student with basic management techniques, including techniques of scheduling, record-keeping, and record storage. Prerequisite: EDT 110.

EDT-108 Legal and Ethical Issues (2-0-2)
This course concentrates on didactic legal implications as well as detailed information on confidentiality.

EDT-110 Clinical Experience I (0-12-4)
The student is placed in the hospital setting and experiences practical application of concepts covered in EDT 101. An emphasis is placed on EKG monitoring. Prerequisite: EDT 101.

EDT-111 Clinical Experience II (0-15-5)
A continuation of EDT 110, with an emphasis placed on EEG monitoring. Prerequisite: EDT 110.

EDT-112 Clinical Experience III (0-18-6)
A continuation of EDT 111. Prerequisite: EDT 111.

EDU-100 Reading Assistant (4-0-4)
Study of the role of the reading assistant as she/he works with the reading teacher. Emphasis upon equipment, materials, and records used. Students should gain a knowledge of readiness for learning and word recognition skills and activities. Prerequisite: EDU 104.

EDU-101 Child Growth and Development I (5-0-5)
A detailed study of the developmental sequence of the prenatal infant and preschool periods with emphasis on developmental influences and conditions necessary for optimal development of individuals.

EDU-103 Working with Young Children (4-6-7)
Case presentation, films, observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and some knowledge of how to adapt learning to the needs of individual children.

EDU-104 Introducing Reading (3-0-3)
An introduction to reading for the young child with emphasis on the development of reading skills, methods and materials.

EDU-110 Methods of Teaching Industrial Subjects (3-0-3)
A study of effective methods and techniques of teaching industrial subjects. Emphasis given to class organization; student-teacher planning; methods of teaching manipulative skills and related information; lesson planning; shop safety; and evaluation. Teaching problems will be studied and analyzed following directed observations in the public schools.

EDU-111 Use of Media in Instruction I (3-0-3)
A basic course in the planning and production of slides, still pictures, mounting and preserving materials, graphics, transparencies, and audio recordings for instructional use. The design and application of these materials are related to current theories of instruction. Emphasis will be placed on developing audio-visual materials designed to achieve specific instructional objectives.

EDU-112 Shop Organization and Planning I (2-2-3)
A study of problems related to vocational shop layout, planning and management, supplies and equipment handling, textbooks, sources of materials.

EDU-113 Shop Organization and Planning II (2-2-3)
A continuation of EDU 112.

EDU-114 Safety in the School Shop and Labortory (3-0-3)
A course designed to cover the basic requirement necessary for a safe environment for the inexperienced student. A thorough study of the requirements of the Federal Occupational Safety and Health Act as it applies to school problems will be conducted.

EDU-115 Introduction to Industrial Education (3-0-3)
The place of vocational education in a program of public education and the fundamental principles upon which this work is based.

EDU-116 History and Philosophy of Industrial Education (3-0-3)
Historical study of trade and technical education movement. Place, function, and changing concepts of industrial and technical education in American education. Economic sociological and psychological aspects.

EDU-117 Program and Course Development (3-0-3)
Methods of developing program and course content and structuring into a workable instructional system. Individualized instructional techniques will be covered. Each student will prepare a selected program in detail.

EDU-118 Principles of Cooperative Education (3-0-3)
A discussion of the principles and practices of cooperative education in use today. The advantages and problems of the technique as a facet of total education will be covered along with techniques of implementation in various programs.

EDU-119 Occupational Guidance (3-0-3)
An introduction to the understanding and motivation of vocational students. Proper use of records and tests in cooperation with available counseling services in evaluating student problems and potential problems. Stimulating learning through understanding and control of personal and environmental variables in the classroom.

EDU-121 Drafting for the Vocational Instructor I (3-0-3)
An introduction of basic skills and techniques of drafting. Included are uses of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instruments drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

EDU-123 Environmental Concepts in Education (3-0-3)
A workshop to introduce instructors to the significance of human ecology in their own discipline. Environmental teaching aids, curriculum materials and area resource personnel will be introduced. Methods of including environmental concern into regular subject matter will be covered.

EDU-124 Teaching the Handicapped Student In Occupational Education (3-0-3)
An exploration into the psychological and educational processes necessary in the teaching of the handicapped student are explored.

Different handicaps are discussed and evaluated as to the expectation and accomodation of the handicapped student in a regular classroom setting.

EDU-125 Drafting for the Vocational Instructor II (3-0-3)

An extension and broadening of the techniques used in EDU 121.

EDU-131 Child Growth and Development II (5-0-5)

A detailed study of the developmental sequence during the preschool and early childhood years. Emphasis is given to factors influencing development: the importance of experiences in establishing patterns of behavior, attitudes, interpersonal skills; language usage, and the relationship of early childhood to later realization of potential. Prerequisite: EDU 101.

EDU-133 The Family—A Cross Cultural Survey (3-2-4)

Study of the family as a social unit, with primary focus on the influence of family relationships during infancy and childhood. Historical patterns and the evolution of family roles in various types of cultures provide opportunities to analyze and interpret the influence of the culture and the family in relation to the large society.

EDU-135 The Family and the Community (4-0-4)

Study of community agencies concerned with physical and mental health in families, socio-economic problems, and education for child-rearing. Prerequisite: EDU 133.

EDU-136 Marriage and Family Relations (5-0-5)

A study of dating relations and preparation for marriage, leading to an examination of the marriage process, stressing individual responsibility in making marriage and parenthood meaningful. Includes relationships among family members.

EDU-140 Use of Media in Instruction II (3-0-3)

Students are given hands-on experience in the use of media that will be of practical use in the classroom. Projects and demonstration of skills in the use of media form and instructional need is required of those successfully completing the course.

EDU-200 Seminar (5-0-5)

Seminar on practicum experiences and discussions on issues such as discipline, being professional, and federal rules and regulations for daycare centers.

EDU-201 Activities for Young Children (5-6-8)

Individual and group exploration of activities and media for promoting optimal overall development of children, with special emphasis on music, art, science, and oral language development. Laboratory experiences provide opportunities to plan and implement a program which demonstrates an adaptability of specified activities and media to a variety of age levels. Prerequisite: EDU 103.

EDU-202 Practicum (0-20-2)

Student will work in a daycare center, public or private school, or college approved facility. Approval of advisor and work coordinator is required.

EDU-203 The Exceptional Child (3-0-3)

Study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: EDU 201.

EDU-204 Parent Education (3-0-3)

Study of ways parents can be involved in the child development center, of the purposes and value of home visitation, and of techniques for reporting child progress to parents. The role of early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisite: EDU 135.

EDU-207 Special Problems in Early Childhood (3-0-3)

Directed study of a specialized area of early childhood, appropriate to the individual career interests of students. Prerequisite: EDU 203.

EDU-208 Physical Activities for Young Children (3-0-3)

This course is designed to help the student gain an understanding and appreciation of the role that physical education plays in the

development of the preschool child. Selection of activities and organization will be stressed.

EDU-209 Child Management (3-0-3)
This course is designed to help the student gain an understanding of the principles and practices involved in managing the behaviors encountered in the early childhood setting.

EDU-210 The Child and Community Services (3-0-3)
Study of the types of facilities needed by a community concerned with the well-being of its children. Analysis of child needs which can be met through community planning, with identification of local, state and national resources. Prerequisite: EDU 135.

EDU-211 Children's Literature (3-0-3)
A survey of literature appropriate for the preschool and early childhood age children. Emphasis upon types of literature, selection and use.

EDU-212 Day Care Administration (3-0-3)
A review of administrative topics common to most early childhood programs. Topics include establishing goals, policies and philosophy; budgeting and funding; and service and regulatory agencies. State licensing and federal certification guidelines will be emphasized. Students will develop a hypothetical program to demonstrate understanding of the above concepts.

EDU-213 Curriculum Development for Young Children (3-2-4)
Evaluating the strengths and needs of individual children and incorporating this information into daily, unit and yearly plans are the major emphasis of this course. A study of methods used to coordinate efforts within and among classrooms in a center to maximize a child's potential for growth will be included. Students will examine different types of curricula and study methods of implementation.

EDU-214 Art for Young Children (0-3-1)
This course is designed to help the student gain an understanding and appreciation of the role that art plays in the total development of children in an early childhood setting. Selection, organization, and construction of appropriate developmental art activities will be emphasized.

EDU-222 Media Resources and Library Skills (2-0-2)
Demonstrations and practical experiences in the use of instructional media of all types along with a practical guide to the use of the library and its various types of services as they relate to the teaching program.

EGY-101 Introduction to Alternate Energy Systems (2-0-2)
Survey of the current applications of alternate energy; principles of solar collection, storage, and distribution; examples of solar installations, overview of wind, hydro, and solar electric conversion systems.

EGY-102 Solar Radiation (2-0-2)
Nature of solar radiation; daily and seasonal variations in the amount and direction of solar radiation; information on orienting collectors; use of clear-day insulation tables; use of meterological data.

EGY-103 Principles of Solar Collectors (3-6-5)
Summary of commercially-available types of collectors; components of collectors and their relation to function; materials selection; description of collector performance; testing of collectors; lab work in pipe fabrication and collector demonstrations.

EGY-104 Solar Hot Water Systems (4-6-6)
Design of hot water systems for swimming pools and domestic use: selection of components; principles of operation; methods of freeze protection; sizing; monitoring of systems and labwork in pipe fabrication.

EGY-105 Space Heat Demand (2-0-2)
Principles of heat transfer; description of heat loss; survey of materials to decrease heat loss; heat load calculations.

EGY-106 Passive Design (5-0-5)
Relation of building to natural environment; direct gain, indirect gain, and isolated gain systems concept, use of thermal mass and moveable insulation; rules of thumb for sizing; architectural design in relation to heating and cooling.

EGY-107 Solar Space Conditioning (4-6-6)
Use of collectors and isolated storage for active solar space heating; techniques for site-built collectors, combined domestic hot water and

space heat systems; sizing of components; use of non-solar backup. Prerequisites: EGY 104 and AHR 101.

EGY-108 Experimental Design (1-2-2)
Scientific method; laboratory procedures; data collection; experimental uncertainties and analysis of precision; problem-solving techniques; testing procedures; use of laboratory instrument; use of data processing. Prerequisite: MAT 105.

EGY-201 Installation and Maintenance of Solar Energy Systems (3-6-5)
Installation of collectors and other solar components; connecting pipes and ducts; checking out the systems; provisions for future maintenance; routine maintenance; troubleshooting and repairs. Prerequsite: EGY 107.

EGY-203 Design of Alternate Energy Systems (2-2-3)
General design procedure; evaluation of input requirements and design options; exercises of design of solar energy systems for hypothetical clients; development of design portfolio. Prerequisites: EGY 106, EGY 107, and EGY 205.

EGY-205 Photovoltaic Systems (3-2-4)
Photovoltaic principles, panels, and arrays; storage of electricity; controls and interface with utility; back-up electricity sources; estimate of electric demand. Prerequisite: ELC 109.

EGY-206 Energy Management and Planning (2-0-2)
Energy conservation by management for residential, commercial, and industrial applications; energy audit procedures; cost-benefit analysis of various energy use options; management of peak load; use of electronic and computer control for load management. Prerequisites: EGY 105 and ECO 201.

EGY-208 Wind and Hydro Systems (2-0-2)
Measurement of wind and water resource; commercially available wind plants, waterwheels and turbines; electric generators; electric storage options; control options. Prerequisite: ELC 109.

EGY-209 Advanced Control Systems (2-2-3)
Application of control methods to particular examples of alternate energy systems. Prerequisite: AHR 201.

EGY-210 Energy Project Lab I (2-4-4)
Individual projects to apply knowledge gained in previous courses; experience in construction of systems; individual research; development of basic masonry and carpentry skills.

EGY-211 Energy Project Lab II (2-6-4)
Continuation of EGY 210 with emphasis on design of alternate energy systems; construction projects; individual research. Prerequisite: EGY 203.

EGY-1115 Solar Energy (12-6-15)
An introduction to the uses of solar energy by studying the principles of the basic concepts and practical uses. Hands on projects will be used for demonstrations.

EGY-1123 Solar Pipework (1-4-3)
The basic concepts of solar energy as applied to basic plumbing and heating.

EGY-1125 Solar Domestic Hot Water (4-4-6)
Types, components, operation, freeze protection, sizing, and installation of solar domestic hot water systems.

EGY-1130 Passive Solar I (5-0-5)
The student learns the basics of designing with climatic to minimize mechanical heating and cooling requirements.

EGY-1131 Passive Solar II (6-0-6)
A continuation of Passive Solar I. Studies will review passive solar design house plans in this area.

EGY-1142 Active Solar Space Conditioning (5-4-7)
Collectors, storage, transfer fluids, distribution systems, back-up energy sources, controls and other components of active solar space conditioning systems; operation of solar powered absorption cooling; estimates of space heating and cooling loads and sizing of system components.

EGY-1143 Installation and Maintenance of Solar Systems (1-4-3)
Individual projects will apply knowledge gained in previous course; experience in system construction development of basic masonry and carpentry skills.

EGY-1155 Supervised Work Experience (0-20-2)
The student will be employed in a project or business using the concepts of solar energy.

EGY-1156 Professional Seminar (5-0-5)
Discussion of special topics in the field of solar energy.

ELC-109 Fundamentals of AC and DC (3-2-4)
Understanding the basic circuits involved with batteries and power supplies. Examination of alternating current and its use in the broadcast field.

ELC-1108 Residential Wiring (7-6-9)
Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mock-ups.

ELC-1110 Basic Electricity (1-3-2)
This basic electricity course will introduce students to the structure of matter, electrical terminology, symbols, and electron theory of current flow. Emphasis will be placed on the use of testing equipment for troubleshooting appliances.

ELC-1112 AC and DC Circuits (Theory and Practice) (7-6-9)
A study of Ohm's Law and resistive circuits is covered. Skills are developed in the theory and uses of inductors and capacitors along with the application of a VOM.

ELC-1113 AC — DC Machines (7-6-9)
This course provides fundamental concepts in single and ploy phase alternating current, circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis.

ELC-1116 Industrial Electronics (7-6-9)
A 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.

ELC-1118 Commercial/Industrial Controls (4-6-6)
Industrial electronic systems such as motor controls, alarm systems and controls, management amplifier controls, and other basic solid-state types of systems commonly found in most industries are studied.

ELC-1119 Programmable Controllers (4-6-6)
Advanced control circuits are discussed. Programmable control devices are covered.

ELC-1123 Electrical and Control Systems (1-2-2)
Fundamentals of DC and AC circuits; familiarization with residential power wiring; sensors and controllers used in heating systems.

ELC-1125 Electrical Troubleshooting (2-3-3)
The course is designed to improve the troubleshooting capability of individuals who will be expected to maintain electrical equipment found in commercial establishments. Topics such as electrical discharge units, resistive loads, and power circuits will be covered. Emphasis is also placed on three phase power systems and motor control circuits.

ELC-1126 Preventative Maintenance for Environmental Systems (5-9-8)
Routine maintenance practices such as the replacement of worn belts, the changing of filters, and the lubrication of bearings are discussed.

ELC-1127 Electrical Maintenance Procedures (2-3-3)
General repair and placement of light switches, lighting fixtures, electrical sockets and outlets are covered. The use and application of a volt-ohm meter is discussed.

ELN-102 Introduction to Electronics (5-4-7)
This course will provide a brief overview of electronics technology and of the careers available to the technician. The courses will concentrate on basic concepts of current, voltage, resistance, power, and series-parallel networks. Laboratory activities will stress safety. The use of the bench meter and basic soldering tools and techniques will be explored.

ELN-104 Circuit Analysis (5-4-7)
Circuit Analysis focuses on the fundamental concepts of alternating current. Generation of the sinusoidal waveform, transformer action, reactance, vectoral analysis, and resonance are primary topics.

Laboratory activities will support concepts from lectures. Acceptable use of the oscilloscope will be stressed.

ELN-106 Solid State Devices (5-4-7)
Will start with a review of vacuum tube operation and follow the development of solid state semiconductor devices from doping of intrinsic materials through the construction techniques used for IC production. Emphasis is placed on the theory of operation of the basic discrete semiconductor devices focusing on the bipolar, unijunction and field effect transistor families. The SCR and other common thyristors are also examined.

ELN-109 Digital Logic Circuits I (3-2-4)
Use of logic gates and counting circuits; flip-flops, timers, displays, and registers; diode transistor, resistor transistor, and transistor, transistor logic. Prerequisites: ELN 201 and MAT 119.

ELN-110 Basic Troubleshooting (3-2-4)
Basic Troubleshooting is a course designed to help the beginning technician learn to effectively use test equipment to locate, and repair circuit faults. A systematic approach to troubleshooting will be stressed. The student will learn to use basic test equipment, hand tools, and chemical agents commonly used in the electronics industry. A practical hands-on approach is emphasized.

ELN-112 Electronics Practicum (0-10-1)
The student is assigned to work in a laboratory or shop environment to strengthen their technical background.

ELN-130 Converter Fundamentals and Design (3-2-4)
Theory of RF converter systems explained. Mixers, oscillators, and wideband amplifiers are discussed. Laboratory test procedures emphasized.

ELN-131 Converter Analysis (3-2-4)
A continuation of ELN 130.

ELN-132 Test Instruments (1-3-2)
Training in the use of test calibration equipment emphasized. The logical approach to electronic equipment troubleshooting is explained.

ELN-133 Communication Circuits (3-2-4)
The basic theory and application of AF and RF amplifiers is discussed. Various transmitter and receiver stages are explored.

ELN-201 Electronic Circuits (5-4-7)
Will examine the principles and applications of tuned circuits, amplifiers and oscillators. Laboratory test equipment will be used to evaluate operating circuitry and demonstrate principles covered in lecture.

ELN-202 Linear Circuits (1-4-3)
Linear Circuits will focus on the characteristics of linear IC's and OP amps. Applications in consumer electronics and instrumentation will be covered. Laboratory activities will verify electronic characteristics of specific devices.

ELN-203 Measurement and Control I (3-6-5)
A study of the concepts of measurement and control, levels of accuracy and traceability. Also covered are the theory and calibration of pressure gauges, vacuum gauges, and pressure switches using laboratory standards such as the dead weight tester, manometer, precision test gauges, and associated hardware. General shop practices are included.

ELN-204 Electronic Communications (5-4-7)
AF, IF and RF amplifiers and oscillators; AM, FM, PM, and SSB principles and applications; and communication test instruments. Prerequisites: ELN 201 and MAT 117.

ELN-205 Computer Repair (2-4-4)
The internal operation of micro- and mini-computer is explored. System layouts and designs are studied. The interconnection of memory circuits, timing circuits, central processing units, and input/output devices and how they make-up a computer is emphasized. The interfacing of external devices through various ports and buses is studied. Signal paths and logic states are determined along with various troubleshooting techniques.

ELN-207 Advanced Electronics (5-4-7)
Microwave equipment, radar, and other special communications circuits. Emphasis placed on microwave and special purpose antennas

along with waveguide and other high frequency transmission media. Applications of klystrons, magnetrons, and TWT's covered. Prerequisite: ELN 204.

ELN-209 Digital Logic Circuits II (3-2-4)
Study of various logic circuits including electronic gates, adder circuits, shift registers, memory circuits, and timing circuits. The world of microprocessors is explored. Laboratory application of theory is emphasized. Prerequisite: ELN 109.

ELN-210 TV Systems Analysis (5-4-7)
Introduces the theory of basic TV broadcasting and reception circuitry. The emphasis of this course is on black and white television receiver circuitry. Laboratory activities will stress the proper use of electronic test equipment to examine circuit operation.

ELN-213 Measurement and Control II (3-6-5)
A study of control theory and applications with emphasis on electronic controls and mechanisms. Control loops and configurations of electronics and pneumatics are constructed and placed in operation. Applications of interfacing are covered along with calibration and alignment of constructed systems.

ELN-216 Industrial Electronics (3-2-4)
Standard and novel industrial methods and systems of counting, switching, and speed control are covered. Emphasis is placed on the latest techniques of high speed controls using diacs, triacs and other solid state devices.

ELN-217 Industrial Electronics and Controls (5-4-7)
The purpose of this course is to provide an overview of industrial electronics from simple switching and ladder logic through programmable controllers and microprocessor controlled equipment. Topics will include high power circuitry, three phase, industrial DC motors, relay and sensing devices. The concept of open and closed loop feedback will be stressed. Emphasis will be on electronic devices and the low power aspects of industrial circuitry.

ELN-220 Antenna Design (3-2-4)
Involves study of single and complex antennas, materials, physical dimensions, design formula, skill effect, gain, radiation patterns, sine loss, standing wave radio, reflected power, and various methods of field strength evaluation. Antennal project building included.

ELN-221 Two-Way Radio Systems (3-2-4)
Emphasis is placed on two-way radio circuitry used in commercial applications. A review of FCC rules and regulations associated with the use of two-way radio is also covered. Troubleshooting and repair of transmitter and receiver circuitry is also included.

ELN-222 Special Project Building I (0-4-2)
Special Project Building is an open lab course offered for students interested in project construction. All projects are arranged on an individual basis and require prior approval from the instructor.

ELN-223 Special Project Building II (0-4-2)
A continuation of ELN 222.

ELN-224 Electronic Layout and Design (0-3-1)
Will examine the development of the printed circuit board from an engineering sketch through the operation of the finished product. Conventions of electronic drafting, schematic develoment, and board layout will be stressed. The basic industrial processes for art and board production will be discussed. Students will produce circuit boards using one or more of the basic production techniques.

ELN-225 Advanced Troubleshooting Procedures (2-6-4)
Advanced Troubleshooting Procedures is a continuation of ELN 110. This course will stress the logical analysis and systematic location of faults in electronic circuitry. Students will troubleshoot circuit problems using laboratory equipment for signal injection, tracing, voltage, current and waveform measurement in analog and digital circuitry.

ELN-226 Measurement and Control III (3-6-5)
Troubleshooting techniques are studied and practiced using standard instrument maintenance test equipment. Actual loops and control systems are set up and tubing and piping layouts are studied. Instruments are dismantled, reassembled, calibrated, and placed in service.

ELN-228 Instrumentation Projects (2-6-4)
Laboratory projects in electronic and pneumatic instrumentation to promote individual initiative and project responsibility. Involves a review

of major concepts in previous courses. The student will have maximum opportunity to develop, evaluate, and carry his projects to a successful conclusion.

ELN-229 Instrumentation Field Trips (0-3-1)
Field trips and lectures by instrument technicians and engineers in local industries are provided.

ELN-234 Electronic Fabrication (0-3-1)
Electronic Fabrication is a continuation of ELN 224. Starting with PC board production this course will explore considerations for small production runs. Front panel layout and ergonomic factors will be discussed. Students will be expected to develop an instruction manual, parts list, and an explanation of the theory of operation.

ELN-235 Instrumentation and Testing (3-3-4)
Will examine the circuitry of various test instruments. Basic meters, bridges, attenuators, and counters will be examined. Analog and digital instrumentation will be explored. Students will be expected to select and demonstrate laboratory instruments. Standardization and calibration techniques will be covered by simulation.

ELN-236 Microprocessor Analysis (3-3-4)
Microprocessor architecture, internal registers, and internal bus structures. Machine language programming, using operation codes to move data internally. Study of how memory sequentially stores and supplies the program for performing computer operations.

ELN-237 Microprocessor Interfacing (3-3-4)
Timing and control signals and sequential operation for performing instructions. Use and analysis of microprocessors (CPU) with arithmetic and control units on one chip and other complementing chips.

ELN-238 Microcontroller Design (3-3-4)
Timing and control signals necessary to interface the central processing unit to peripheral equipment. Data transformed from serial to parallel and from parallel to serial using UART chips for bus structured systems. Latching of data and interrupts and real time problems.

ELN-239 Digital Communications (3-2-4)
A detailed study of the computer system as a unit. Topics studied include system architecture, interfacing peripherals to the CPE, peripheral drivers (hardware and software), magnetic storage techniques, disk storage systems, printing and video terminals and operating systems and system software. Various computers are discussed with the TRS-80 disk-based microcomputer and various mainframe systems covered in detail.

ELN-240 Advanced Microprocessor Design (3-3-4)
Basic registers and counters. The arithmetic unit of the computer. Serial and parallel systems. Timing and control unit. Principles of storage. Memory and address registers. Memory selection techniques. Machine language programming.

ENG-010 Reading (0-5-2)
Encourages the student's development of reading comprehension and reading rate. The course emphasizes the grasp of basic ideas rather than words and offers workable techniques which the student may use in reading assignments. These techniques help the student to identify, interpret, and evaluate ideas.

ENG-011 Basic Grammar (0-5-2)
An intensive study of grammar for students whose English placement score indicates a need for special help in developing the needed skills for college writing. Prerequisite: ENG 010 or exemption.

ENG-080 Develomental English I (0-5-2)
Student learns to identify parts of speech such as nouns and verbs, adjectives and adverbs, and their relationships to the sentence as a whole. Student learns distinction between sentences and fragments.

ENG-081 Developmental English II (0-5-2)
Student furthers knowledge of parts of speech and receives an introduction to phrases and clauses. End punctuation of sentences is studied, especially in relation to complete and incomplete sentences.

ENG-082 Developmental English III (0-5-2)
Student continues study of phrases and clauses, including phrase and clause functions as modifiers. Use of internal punctuation is studied,

with special emphasis on the comma. Students may begin writing model paragraphs.

ENG-083 Developmental English IV (0-5-2)
Student learns use of various other types of internal punctuation such as semicolon, colon, and quotation marks. Student continues study of paragraph form, with emphasis on the various types of paragraphs such as contrast and comparison.

ENG-101 Language and Composition I (5-0-5)
The first of a two-course series designed to improve writing skills. This course exposes students to grammar, punctuation, syntax and paragraphs. Prerequisite: ENG 010 or exemption.

ENG-102 Language and Composition II (5-0-5)
Teaches the student to write clearly and effectively. This course is a continuation and further development of English 101. The emphasis is on developing the longer composition. Library research is introduced. Prerequisite: ENG 101.

ENG-103 Report Writing (3-0-3)
Utilizes the fundamentals of English as a background for the organization and techniques of modern report writing. Exercises in developing typical reports using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must relate to his chosen curriculum. Prerequisite: ENG 102.

ENG-110 Freshman Composition I (5-0-5)
Development of writing skill: planning, organizing, and editing paragraphs and expository essays. Emphasis on effective syntax, correct punctuation and grammar.

ENG-112 Freshman Composition II (5-0-5)
Introduction to the research paper and the study of literature. Emphasis on methods of research and documentation. Development of skill in literary analysis. Prerequisite: ENG 110.

ENG-204 Oral Communications (3-0-3)
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques. Prerequisite: ENG 102 or 112.

ENG-211 American Literature I (5-0-5)
A survey of American Literature beginning with the Colonial Period and concluding with the Romantic Period. Major emphasis will be on literature that reflects significant themes and concepts, including Calvinism, Transcendentalism, Romanticism and Realism.

ENG-212 American Literature II (5-0-5)
A survey of American Literature beginning with Emily Dickenson and concluding with Cheever, Updike and Oates. Emphasis will be on literature which reflects the themes and concepts of Realism, Naturalism, Regionalsim and Existentialism.

ENG-220 English Literature (5-0-5)
A survey of English literature, beginning with *Beowulf* and concluding with William Blake's poetry.

ENG-222 Theatre Activities I (0-6-2)
Provides laboratory course work in all phases of theatre production.

ENG-1106 Fundamentals of English (3-0-3)
Designed to aid the student in the improvement of self-expression in grammar, composition, and the basic reading skills.

ENG-1111 Reading Comprehension (2-0-2)
Designed to develop the student's reading comprehension directly related to specifications, code books and installation manuals for building construction.

ENG-1112 Communication Skills (2-0-2)
To develop the student's ability to communicate successfully both in speaking and writing. Emphasis on vocabulary, letter writing, and reports as related to the construction industry.

ENV-111 Supervised Work Experience (0-20-2)
Students are given actual on-the-job training; they are placed with a government agency or private business which deals with environmental monitoring.

ENV-120 Land Resource Management (3-4-5)
An integrated course aspect of geology, soil and water conservation, and the relationship of these factors to the biological community.

Methods of land management will be discussed allowing controlled growth without environmental degradation.

ENV-130 Microbiology (3-4-5)
A study of general microbiology with emphasis on micro-organisms associated with pollutants such as industrial waste and sewage. Lab will include methods of isolating, culturing and staining selected micro-organisms. Prerequisites: BIO 101, CHM 101.

ENV-207 Water Analysis and Treatment (3-2-4)
Topics cover routine analysis for water quality and operational procedures for water treatment plant operations. Water treatment plant design is also included.

ENV-208 Fisheries Management (3-2-4)
A study of the aquatic environment and fishery science. Life history and biology of important game and commercial fishes, age and growth analysis, population estimations, fish culture, fish management, and pollution studies.

ENV-210 Ecology (3-2-4)
A basic course designed to acquaint the student with the relationships between organisms and their environment, and of interactions among organisms. Lectures, laboratories, and field trips present a balanced perspective in environmental biology. Included will be productivity, nutrient cycling pollution, environmental factors affecting aquatic and terrestrial systems regulation and dynamics of populations, interactions among species, community ecology and the ecological viewpoint in modern land management.

ENV-213 Air Sampling, Analysis and Control (3-4-5)
A study of air quality standards, air monitoring equipment, and techniques for sampling air. Labs will include sampling and analysis of ambient air.

ENV-216 Environmental Health (3-2-4)
The influence of environmental conditions on human health. Special emphasis given to medical laboratory procedures including bacteriology, hematology, clinical chemistry, and urinalysis, used in assessing health.

ENV-224 Chemistry of Wastewater (1-6-4)
Course content is designed to teach routine laboratory analysis of wastewater. Laboratory procedures include routine testing for temperature, pH, solids, DO, BOD, COD, oil and grease, ammonia, and coliform bacteria.

ENV-229 Meterology (3-4-5)
A study of atmospheric phenomena and regional weather patterns of North America, with emphasis on atmospheric composition and structure; wind systems; air masses, fronts and cyclones; cloud types and precipitation; weather modification and application. Labs emphasizing weather forecasting accompany lectures.

ENV-230 Environmental Quality, Laws and Enforcement (3-0-3)
A study of local, state, and federal laws and acts concerning environmental quality standards and the use of resources, legal procedure for enforcing laws, and problems concerning enforcement. Included will be environmental standards dealing with polluting sources such as industry, agriculture, municipalities, and individuals.

ENV-231 Environmental Project (1-12-5)
This course consists of a supervised work project concerning an environmental problem in the area which would enable the student to put to use some of the principles of environmental management.

FAS-101 Introduction to Fashion Merchandising/Marketing (4-0-4)
Covers the nature of the business enterprise, and the industrial practices involved in the design, production, retailing and consumption of fashion products, with major emphasis on marketing activities and interrelationships.

FAS-103 Elements and Coordination of Fashion (4-0-4)
Examines the dynamics, language and coordination of fashion and analysis the basic styles, sizes, construction, and workmanship of apparel products.

FAS-104 Fashion Accessories (4-0-4)
Concerns itself with the properties, characteristics, and construction of leather, fur, hosiery, intimate apparel, belts, umbrellas, millinery, wigs, jewelry, and cosmetics as they affect the knowledgeable buying and selling of these products.

FAS-110 Fabric Science I (4-0-4)
This course is designed to create a knowledge and understanding of textile fibers and the construction of fabrics, with special emphasis on the properties that affect their appearance, durability and end use.

FAS-112 Fashion Salesmanship (3-0-3)
Covers the principles of salesmanship and their application to creative and effective techniques for selling fashion products, by means of role playing various selling situations.

FAS-116 Fashion Sketching (2-2-3)
To help students develop fashion sketching techniques for promotion designs which are already complete, and also for illustrations in magazines, newspapers, poster design and display. Also, enables students to acquire knowledge of figure proportions.

FAS-117 Commercial Display Design (2-3-3)
A course that examines display as a visual merchandising medium and discusses the principles of display design and their application to fashion merchandising environments.

FAS-201 Seminar/Practicum (5-10-6)
Students are given on-the-job training in retail stores which provide experiences which will be encountered in an actual working environment.

FAS-210 Fabric Science II (4-0-4)
This course emphasizes the importance of the selection of appropriate fabrics for specific uses in apparel and discusses factors to be considered in examining the construction of finished garments as they relate to effective and efficient buying. Prerequisite: FAS 110.

FAS-212 Professional Wardrobe Analysis (1-0-1)
This course will emphasize wardrobe planning and coordination. Included in this will be: personal color analysis, developing a professional clothing style appropriate for each individual and occasion. Also, coordinating wardrobe and cosmetics.

FAS-214 Personal Selling of Fashion (3-0-3)
A study of personal selling techniques with special emphasis placed upon the selling of fashion products. Preparation for an execution of sales demonstrations is required. The study also includes the following: developing interpersonal skills and motivation, learning various types of sales procedures, and problem solving in selling.

FAS-216 Fashion Sales Promotion I (4-0-4)
An introduction to sales promotion activities for all marketing levels with concentration on the specialized tehniques and procedures employed to implement the activities of advertising and copywriting.

FAS-217 Fashion Sales Promotion II (4-0-4)
Covers the types and objectives of the different sales promotion activities that are used to sell fashion products, and the specialized techniques and procedures that are employed to implement fashion shows, special events and publicity, culminating with the presentation of a fashion show. Prerequisite: FAS 216.

FAS-220 Applied Fashion Mrechandising (2-2-3)
Provides students with opportunities to test and apply retail merchandising principles, practices and techniques, through the actual operation and management of a retail store.

FAS-222 History and Psychology of Dress (3-0-3)
A study of the ancient world and its influence on modern concepts of dress. A special emphasis is given to the interrelationship between dress and its cultural, social, psychological, economic, and aesthetic implications.

FAS-224 Fashion Buying and Merchandising (3-0-3)
A course that concerns the use of numbers in merchandising and the mathematical techniques that are used to translate fashion into profit making activities of planning, pricing, and controlling quantities and studies the merchandising techniques that are used to forecast fashions, plan assortments, determine sources of supply, select merchandise, follow through on the sale of the merchandise. Prerequisite: MAT 110

FSO-101 Orientation to Foodservice (3-0-3)
The study of the skills and attitudes needed for successful employment in the food service industry. Detailed information is provided on training requirements, responsibilities, and duties of various food service jobs.

FSO-102 Introduction to Food Preparation (3-6-6)
The first in a series of food preparation courses designed to train the student in short order and quantity food preparation. Emphasis is placed on the development of manual skills and work organization through the preparation of sandwiches, soups, sauces, and salads for service in the college dining room.

FSO-103 Equipment Use and Care (3-0-3)
Designed to teach the student how to safely operate, maintain, and clean most standard restaurant equipment, particularly that in the food preparation laboratory.

FSO-104 Sanitation and Safety (3-0-3)
A study of standard sanitation and safety practices to prevent health hazards and avoid injuries.

FSO-105 Introduction to Garde Manger (1-3-2)
This is an introduction to basic cold food preparation including appetizers, cold sauces, salads and vegetable carvings.

FSO-106 Dining Room Procedures (1-3-2)
A course designed for service personnel which covers the following subjects: equipment, personnel responsibilities, organization, customer relations, sanitation, table arrangements and set-ups, and service techniques for American service.

FSO-107 Baking I (2-6-4)
A study of the basic tools, equipment, and ingredients necessary for baking as well as baking terminology. Students gain practical experience by baking quick breads and yeast breads for service in the college dining room.

FSO-109 Production Management (3-0-3)
A study of production systems. The establishment of objectives, guidelines, and policies is stressed as well as effective personnel management.

FSO-112 Food Preparation II (3-6-6)
The first in a series of food preparation courses designed to provide training in meal preparation and service. Different techniques of beef and vegetable cooking will be studied. Meals will be served in the College dining room.

FSO-114 Menu Planning and Nutrition (5-0-5)
Offers the student an introduction into nutrition as well as menu writing basics.

FSO-117 Baking II (2-6-4)
Emphasis is placed on dessert preparations. Students prepare pies and cakes for service in the College dining room.

FSO-122 Food Preparation III (3-6-6)
Provides the student with additional training in meal preparation and service. Different techniques of pork, poultry, and vegetable cooking will be studied. Meals will be served in the College dining room.

FSO-141 Hospitality Management (3-0-3)
Acquaints the student with the general functions of a manager: planning, organizing, staffing, controlling, and directing. Different segments of the hospitality industry are also studied with particular emphasis on the future as well as the present.

FSO-202 Food Preparation IV (3-6-6)
A study of the cooking process in relation to nutrition, organic chemistry, and thermodynamics. In addition, students prepare meals for service in the College dining room.

FSO-204 Food Purchasing and Cost Control (5-0-5)
An introduction to the subjects of cost and sales control designed to instill in the student an awareness of the increasing need for controls in the highly diversified foodservice industry.

FSO-207 Food Merchandising (4-2-5)
A study of creative marketing techniques and strategies for the food service enterprise. The proper display of food and effective use of the menu is stressed in the practical lab.

FSO-212 Food Preparation V (3-6-6)
Students continue to study the cooking process and modern cooking approaches. Meals are planned, prepared, and served by student in the College dining room.

FSO-214 Specialty Cooking (2-4-3)
Designed to expose the student to international cuisine. Food will be prepared and served in the College dining room.

GCS-1110 Introduction to Aging and Geriatric Care (5-2-6)
An introduction and study of the role and functions of the geriatric assistant. Topics to be studied include: long-term care of the elderly, the aging process, communication, therapeutic activities, death and dying, services and resources for older persons, emergencies in the workplace, employment in long-term care, etc.

GCS-1111 Geriatric Nursing Skills (4-4-6)
A continuation of GCS 1110. Basis health care skills and knowledge of the body systems and system-related age changes will be studied.

GCS-1112 Geriatric Nursing Clinical (0-18-6)
Practical applications in a clinical setting of functions taught in GCS 1110 and GCS 1111.

GEO-102 Cultural Geography (5-0-5)
Interrelations of man, earth and culture; the geography of race, language, religion; political & economic patterns; populations growth and movements.

HIS-101 World Civilization I (3-0-3)
A survey of world history with special emphasis on European background and development in three time periods: Ancient and early Medieval, later Western and early Modern, and the Modern period.

HIS-211 United States History I (5-0-5)
Emphasis will be upon the backgrounds of discovery, settlement, constitutional development and union. Manifest destiny and the developing sectionalism up until the end of the Civil War.

HIS-212 United States History II (5-0-5)
The continuint study of the development of the United States will cover the Reconstruction, imperialistic tendencies, the progressive movement, World War I and World War II, Korea, Vietnam, and significant issues to the present. Prerequisite: HIS 211 or permission of instructor.

ISC-1101 Industrial Safety (3-2-4)
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 protection; safety codes; and accident statistics.

LEX-100 Paralegal Orientation (3-0-3)
This coruse is a brief overview of criminal law, civil procedure, legal research, techniques of investigation and preparation and presentation of a trial brief.

LEX-103 Legal Research I (3-2-4)
Methods of legal research, proper citation of authority, acquaintance with legal treaties, text, and reporter, shepardizing cases.

LEX-106 Constitutional Law (5-0-5)
Instruction to provide an understanding of the United States Constitution as the basis for our criminal justice system, and to include constitutional rights of accused persons and the limitations on the criminal justice system. Designed to present the evolution of the criminal law and the state and Federal Court systems.

LEX-107 Criminal Evidence and Procedure (4-3-5)
A study of the rules of evidence and admissibility of evidence in court; the kinds of evidence, judicial notice, opinion evidence and the hearsay rule; evidence distinguished from proof and the burden of proof. The law of arrest; search and seizure will be emphasized coupled with the civil liabilities that may accrue. North Carolina Criminal Procedure from arrest to trial will be examined in depth with the problems of nontesimonial identification.

LEX-110 Civil Procedure (3-0-3)
Introduction to basics of civil litigation; N.C. Courts, venue, jurisdiction. In-depth study of Rules of Civil Procedure of North Carolina.

LEX-111 Torts (3-0-3)
Civil wrongs or violations of private rights. Emphasis on more common forms of negligence actions and their legal elements.

LEX-113 Family Law (3-4-5)
The legal obligations in a marriage contract, its rights and privileges upon the contracting parties; the statutory grounds for divorce,

defenses to divorce actions; elements of a legal separation will be studied; drafting pleadings and contractual agreements; study of family problems, juvenile courts, adoption, custody cases, alimony, enforcement of alimony and support orders.

LEX-114 Paralegal Seminar (3-0-3)
Classes designed for specific meeting time for students doing their work experiences. Organization, planning and procedural sessions for instructor and students. Evaluation and discussion of work experience.

LEX-201 N.C. Legal Systems (5-0-5)
This course deals specifically with specific types of legal processes used in the N.C. court system.

LEX-203 Administrative Law (3-0-3)
A study of the substantive law, procedures, and forms involved in practice before administrative agencies including workers' compensation, social security, and employment security.

LEX-208 Criminal Law (5-0-5)
A study of the elements required for specific crimes; classification of various crimes. Emphasis on case research for interpretation of North Carolina Criminal Code. The study of the evolution of criminal law, parties to crime, capacity to commit a crime and criminal defenses.

LEX-210 Mechanics of Property Transactions (3-0-3)
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. (1) Inform purchaser of needed documents and funds; (2) disbursement of funds and recording documents; (3) search continuation and preparation of certificate of title for lawyer's signature.

LEX-211 Title Abstracting (2-2-3)
An examination will be made 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 title to real estate is marketable; the study and function of various documents, indices and files on public records and summaries thereof will be inclued. Various typical problems and errors which may render a title unmarketable will be included.

LEX-212 Real Property (3-2-4)
Practical introduction to real estate law with emphasis on matters correlating with LEX 211 — Title Abstracting. Estates in land; conveyances; drafting of instruments.

LEX-215 The Law Office (2-2-3)
This course 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 filing, client relations and office procedure. This will also familiarize the student with the operation of office machines and equipment.

LEX-220 Legal Research II (3-2-4)
Advanced research into particular points of law together with the writing of briefs and presentation of various materials.

LEX-225 Litigation Preparation (2-2-3)
This course will teach the paralegal how a lawyer presents his briefs prior to entering court proceedings. The student will be taught how to review a file, prepare subpoenas ready for the lawyer's signature, prepare exhibits for court, file pleadings, index interrogatories, depositions, admissions, pleadings. This course will prepare the student to interview witnesses and record statements in writing and on tape.

LEX-232 Estate Administration (3-0-3)
In this course, the student will be instructed in the drawing of wills, 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, preparations of interim and final accounting and preparation of refunding bonds and releases.

MAS-1000 Masonry Shop I (5-15-10)
History of brick and block laying, fundamental skills, laying to line, use and care of tools and equipment. Mortar mixing techniques and general masonry procedures.

MAS-1001 Masonry Shop II (5-15-10)
Development of fundamental skills, bond layout, projects with various types of masonry units, fireplaces, ornamental work, recent developments in the masonry field.

MAS-1005 Rock Construction (5-15-10)
A thorough study of rock construction and the unique techniques and tools required for quality work.

MAS-1010 Beginning Masonry (2-3-3)
Basic techniques of masonry repairs are discussed.

MAS-1020 Related Trowel Trades (5-15-10)
To develop the basic understanding of trowel trades, care and use of tools and equipment. Raw material use and manufacturing processes for plastering, tile setting, and concrete finishing, as related to general masonry.

MAT-080 Developmental Math I (0-5-2)
A self-paced individualized mathematics course designed to develop the basic skills necessary for entrance into the chosen technical or vocational curriculum. Topics depend on the student's entrance level and rate of progress.

MAT-081 Developmental Math II (0-5-2)
A second quarter continuation of MAT 080. A self-paced individualized format in the developmental lab. Topics depend on student's entrance level, rate of progress and chosen curriculum.

MAT-082 Developmental Math III (0-5-2)
A continuation of MAT 081. A self-paced individualized format in the developmental lab. Topics depend on the student's entrance level, rate of progress and chosen curriculum.

MAT-100 Basic Math (5-0-5)
Fundamental elements of mathematics with emphasis on applied problem solving. Topics include: review of computation with fractions and decimals, percents, metric system, geometry, ratio and proportion, elementary equations.

MAT-103 Foundation Skills for Algebra (3-0-3)
A course for students who have mastered arithmetic skills but desire a gradual introduction to algebra. Topics include real number arithmetic, polynomials, linear equations with applications.

MAT-104 Statistics (3-0-3)
An introduction to elementary probability and statistics. Topics include descriptive methods, probability, the binomial and normal distributions, hypothesis testing, correlation and regression. Prerequisite: An introductory algebra course required.

MAT-105 Introduction to Algebra (5-0-5)
Fundamental concepts of algebra: real numbers, exponents, scientific notation, the metric system, polynomials, linear equations and graphs, factoring, algebraic fractions, quadratics. Prerequisite: MAT 100 or equivalent.

MAT-106 Contemporary Mathematics (5-0-5)
A general survey of the scope of mathematics including functions, matrices, logarithms, sequences, combinations, and statistics.

MAT-108 College Algebra (5-0-5)
Advanced algebra topics: functions, factoring, algebraic fractions, roots and radicals, linear and quadratic equations and inequalities and their graphs, solving linear equations. Prerequisite: MAT 105 or equivalent.

MAT-110 Business Math (5-0-5)
Applications of mathematics in the field of business: percents, discounts, borrowing and banking, wages and payrolls, markup and retailing, insurance and financial statements.

MAT-111 Applied Trigonometry (5-0-5)
An abbreviated treatment of trigonometry emphasizing applications: trigonometric functions and their graphs, radian measure, fundamental identities, solutions of triangles, vectors, complex numbers. Prerequisite: MAT 105 or equivalent.

MAT-112 College Math (5-0-5)
A basic course encompassing all operations of fractions, decimals, the metric system and an algebretic formulae.

MAT-115 Electrical Math I (5-0-5)
A basic introductory algebra course with emphasis on applications in electronics. Topics include real numbers, basic elements of algebra,

exponents and radicals, scientific notation, the metric system, dimensional analysis, linear equations, logarithms.

MAT-116 Electrical Math II (5-0-5)
A study of the fundamental trigonometry concepts required in basic electronics applications: trigonometric functions and their graphs, basic identities, solutions of triangles, complex numbers, and the j-operator. Prerequisite: MAT 115 or equivalent.

MAT-117 Electrical Math III (5-0-5)
Intermediate algebra topics: functions, graphs, factoring, algebraic fractions, fractional equations, quadratics, simultaneous equations. Prerequisite: MAT 115 or equivalent.

MAT-119 Mathematics of Computer Systems (3-0-3)
Topics which provide the basis of digital computer architecture: binary and hexadecimal arithmetic, logic gates, Boolean algebra. Prerequisites: MAT 105, MAT 115 or equivalent.

MAT-135 Copyfitting Math (3-0-3)
A course designed to develop the students skills in copyfitting text, display and illustrative media to a layout. Realistic mathematical problems involving ratio, percentages and proportion. Includes an introduction to the use of typesetting equipment.

MAT-145 Health Occupations Math (Metrology) (3-0-3)
A study of topics necessary for effective preparation and administration of medications, computation of dosages and solutions according to the metric, apothecary, and household systems.

MAT-1101 Fundamentals of Math (5-0-5)
Practical number theory. Analysis of basic operation: addition, subtraction, multiplication and division. Fractions, decimals, power and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in-depth.

MAT-1105 Estimating: Plumbing Trades (3-0-3)
Estimating quantities of material and labor costs for installation of plumbing systems in residential and commercial buildings.

MAT-1109 Estimating: Building Trades (4-0-4)
Estimating quantities of material and labor costs related to the building construction trades. Emphasis on uniform construction index and organization of cost data.

MAT-1112 Mathematics: Building Trades (2-0-2)
Analysis of basic operations, addition, subtraction, multiplication, and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures, measurements of surface and volumes, basic algebra related to usage in the trades.

MAT-1113 Estimating: Mechanical (4-0-4)
Determination of probable cost of any mechanical project. In addition to the quantity take off and cost analysis, emphasis will be placed on contract documents, types of agreements, overhead, and organization of data.

MAT-1114 Math for Pipefitters and Plumbers (4-0-4)
Emphasis is placed upon the development of usable skills in the layout, measurements and computations of pipe lengths, including fitting allowance, volumes, pressure, capacities, cylinder stretchouts and angular piping offsets.

MAT-1115 Electrical Math (3-0-3)
A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios and proportions, solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

MAT-1118 Estimating: Electrical (2-0-2)
The student uses actual construction blueprints and specifications to prepare estimates and material purchase lists needed for a total electrical contract or bid. Labor costs, insurance, and other "overhead" expense items are all included in accordance with a current "National Job Cost" pricing scheme. Upon completion of the course the student should be able to prepare a legal bid proposal by using standard structural/electrical blueprints and specifications. Prerequisite: DFT 1104 Blueprint Reading: Electrical or equivalent.

MAT-1122 Machinist Mathematics I (3-0-3)
Fractions, decimals, power and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry. Linear measurement is covered.

MAT-1123 Machinist Mathematics II (3-0-3)
Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions; trigonometric equations. All topics are applied to practical problems. Prerequisite: MAT 1101.

MAT-1124 Machinist Mathematics III (3-0-3)
A continuation of MAT 1123. An introduction of compound angles. Various methods of computing angles of rotation and tilt are covered.

MEC-160 Introduction to Robotics (1-6-3)
Computer mechanisms will examine the fundamental concepts of mechanical and electromechanical mechanisms. Function, specifications, and operating characteristics of common electromechanical devices will be examined. Emphasis will be on equipment that is frequently connected as input.

MEC-235 Hydraulics and Pneumatics (3-3-4)
The basic theories of hydraulics 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-1101 Machine Shop Theory and Practice I (2-6-4)
An introduction to the metalworking trade as it relates to machining operations. The student will be oriented to the machine shop, safety, basic hand tools, and shop measuring instruments. Operations on engine lathes, drilling machines, metal cutting saws, milling machines, and bench grinders will also be covered.

MEC-1102 Machine Shop Theory and Practice II (2-6-4)
A continuation of MEC 1101.

MEC-1103 Machine Shop Theory and Practice III (2-6-4)
A continuation of MEC 1102.

MEC-1104 Machine Shop Theory and Practice IV (2-6-4)
A continuation of MEC 1103.

MEC-1105 Machine Shop Theory and Practice V (2-6-4)
A continuation of MEC 1104.

MEC-1106 Machine Shop Theory and Practice VI (2-6-4)
A continuation of MEC 1105.

MEC-1107 Machine Shop Theory and Practice VII (2-6-4)
A continuation of MEC 1106.

MEC-1108 Machine Shop Theory and Practice VIII (2-6-4)
A continuation of MEC 1107.

MEC-1118 Introduction to Metals (3-2-4)
This course is designed to familiarize the student with different properties of ferrous and non-ferrous metals. It provides a background for understanding the physical changes and chemical metallurgy of producing metals. Explains the material designation system, classification of steels, trade names and cross reference information for comparable materials. Common shop terms used in treatment of metals will be explained.

MEC-1119 Applied Metallurgy (2-3-3)
Covers practical metallurgy theory and practice in the treatment of ferrous and non-ferrous metals. Actual practice of heat treatment will be performed on sample materials with emphasis on low and high carbon steels. Relationships between part design and heat treatment will be applied. Testing equipment for verification of correct treatment will be used. Prerequisite: MEC 1118.

MLT-101 Pathophysiology (4-2-5)
Introductory course dealing with basic disease processes and their mechanisms of action in the human body. Gross material will be presented to students for observation. Students will be oriented to the medical laboratory through discussion of basic laboratory tests which correlate test results with specific disease states. Some basic medical terminology will also be included.

MLT-102 Clinical Hematology I (3-4-5)

A comprehensive study of the origin, maturation sequence, and physiology of cellular components of the blood. Emphasis will be placed on quantitation of cells and other hematological parameters in the laboratory section. Normal hemopoietic functions are studied, as well as the effect of various disease processes on the hematologic values.

MLT-103 Clinical Microbiology (4-2-5)

A study of medically important disease producing microbes, fungi, and parasites. Included will be a review of specific mechanism of disease production and resistance to infection, as well as identification of medically important bacteria using current clinical laboratory procedures. Course emphasis will be directed toward taxonomic classification, identification by culture, biochemical testing, and antimicrobial susceptibility testing. Prerequisite: BIO 104.

MLT-104 Clinical Chemistry (4-2-5)

The student will become acquainted with various human metabolic cycles and how the interrelate. The student should be able to associate specific disease states with changes in chemical constituents in body fluids and be able to quantitate biochemical levels in human fluids utilizing known standards and quality control. The laboratory section will deal with procedures for quantification of body chemical constituents of both normal and abnormal metabolism. Prerequisites: CHM 101 and CHM 102.

MLT-105 Clinical Immunology and Serology (3-0-3)

A study of the basic principles of immunology such a genetics, antigen-antibody reactions and the methods used in the clinical laboratory to test for immunological diseases.

MLT-106 Parasitology and Mycology (1-2-2)

A comprehensive study of the basic principles of testing for clinically significant parasites and fungi, including correlation of disease states with laboratory findings. Prerequsites: BIO 104, MLT 103.

MLT-110 Medical Terminology (3-0-3)

A study of the structure of medical words and terms with emphasis placed on spelling, pronouncing, defining and understanding commonly-used suffixes, prefixes, rootwords and their combining forms.

MLT-112 Clinical Hematology II (4-2-5)

A continuation of MLT 102 in which emphasis is placed on the study of Hematological disease states and correlation of laboratory testing results with these diseases. Also, Hemostasis and coagulation are studied. Prerequisite: MLT 102.

MLT-122 Clinical Microscopy (4-2-5)

A concentrated course with lecture and laboratory components designed to acquaint the student with the analysis of various body fluids to include urine, semen, transudates, exudates, and others. One of the main goals of this course is to correlate abnormal findings in urine and other body fluids with theory learned in other MLT disciplines.

MLT-123 Immunohematology (3-4-5)

This course will develop the concepts of immunology as they relate to serological determinations of disease states in the clinical laboratory, as well as their applications to the processing and administration of blood and blood components in the clinical laboratory blood bank.

MLT-129 Instrumentation (3-0-3)

A study of theory and principles of operation and troubleshooting of any clinical instruments. This course will include actual operation and preventive maintenance of instrumentation, as well as recognition and solution of malfunctions.

MLT-130 Clinical Practicum A (0-36-12)

Each major MLT discipline will have a clinical practice component whereby the student will gain valuable knowledge and experience in the hospital laboratory. Each student will be supervised by a Medical Technologist at the bench in the hospital laboratory. Areas covered in the clinical practicum include Hematology, Microbiology, Chemistry, Urinalysis, Blood Banking and Serology. Prerequisites: MLT 101, 102, 103, 104, 105, 106, 112, 129, and 135.

MLT-131 Clinical Practicum B (0-36-12)

Each major MLT discipline will have a clinical practice component whereby the student will gain valuable knowledge and experience in the hospital laboratory. Each student will be supervised by a Medical Technologist at the bench in the hospital laboratory. Areas covered in the clinical practicum include Hematology, Microbioloy, Chemistry,

Urinalysis, Blood Banking and Serology. Prerequisites: MLT 101, 102, 103, 104, 105, 112, 122, 123, 129, 130, 132, and 135.

MLT-132 Orientation and Evaluation (3-0-3)

Students will be oriented to general hospital rules and given their assignments for their clinical rotations. Also, the learning experiences gained at the clinical facilities will be shared and evaluated. Prerequisites: MLT 101, 102, 103, 104, 105, 106, 112, 123, 129, 130, and 135.

MLT-133 Seminar (3-0-3)

Special topics on Medical Laboratory Technology will be discussed. Also, review procedures for the national board test will be discussed. Prerequisites: MLT 101, 102, 103, 104, 105, 106, 112, 122, 123, 129, 130, 132, and 135.

MLT-135 Special Topics (3-0-3)

A course designed to keep the student abreast of the newest innovations in the Medical Laboratory field.

MUS-101 Music Appreciation (3-0-3)

A broad introduction to the basic materials and use of music. Development of musical forms, elements, stylistic features, rural awareness, and the role of music in society. Emphasis on providing the student with a frame of reference which can increase his ability to understand and enjoy music of different styles and periods.

MUS-106 Creative Listening Experiences (0-3-1)

A non-technical approach to the enjoyment of music. Emphasis on an intelligent listening procedure with materials from standard works from music history. Introduction to the basic concepts in music and their evolution: texture, form, tonality, etc. This course is designed for non-music majors or minors.

MUS-108 Chorus (0-3-1)

Study-activity coruse designed to give the student a deeper understanding, appreciation, and enjoyment of choral music, its practice and performance. Open to all students by permission of the instructor.

MUS-109 Music Today (3-0-3)

Designed to offer students an in-depth view of the music of today in order to more fully understand the influence of the different types of music on our culture, and assist them in gaining a broader comprehension of the sociological, psychological and cultural implications of the popular music scene.

NUR-101 Fundamentals of Nursing (6-4-3-9)

A presentation of basic nursing knowledge and skills with an overall emphasis in meeting basic patient needs with a broad overview of the scope of nursing practice within the health delivery system. The student is introduced to the concept of the health-illness continuum as a basis for implementing the nursing process. Principles of therapeutic communication, knowledge of biological systems, and interpersonal relationships are integrated throughout the courses. Provisions are made for the application of theoretical knowledge and skills in on-campus laboratory and hospital settings where the emphasis is on planning and implementing nursing care. The student is expected to develop beginning confidence in performance of skills utilizing appropriate theory. Prerequisite: BIO 102 must be taken prior to or concurrently with NUR 101, or by permission of Program Director.

NUR-102 Medical-Surgical Nursing I (6-12-10)

Provides beginning knowledge of basic concepts of nursing and care of patients with problems caused by common illnesses. Symptoms of illness, classification of diseases, pre- and post-operative care, long term illness, and concepts of preventive and maintenance health care are included. Principles relating to care of patients in geriatric situations, oncology, rehabilitation, and the dying patient are introduced. Objective-centered clinical learning experiences are planned on selected patients in the medical-surgical units of the hospital. Self-care concepts are stressed. Additional observational experiences provide application of nursing theories and skills relevant to patients experiencing less complex medical-surgical problems as well as therapeutic nursing intervention with patients having musculoskeletal, gastrointestinal, and cardiovascular disorders. Prerequisites: NUR 101, BIO 102, NUT 101, PSY 103; or by permission of curriculum advisor.

NUR-103 Medical-Surgical Nursing II (6-0-15-11)

This course continues the study of Medical-Surgical Nursing I, especially the pathophysiological process and therapeutic intervention pertinent to disorders of the endocrine, reproductive, respiratory, urinary, nervous, and integumentary systems, and allergic reactions. Integrated rehabilitation concepts are continued. Objective-centered learning experiences are continued in medical-surgical units of the local hospitals. Important aspects of this experience are functioning as a member of the nursing team and the utilization of all health team members to promote and achieve total patient care. NUR 107 must be taken prior to or concurrently with NUR 103. Prerequisite: NUR 102 or by permission of curriculum advisor.

NUR-104 Maternal-Child Health Nursing (6-15-11)

Maternal-Child Health Nursing applies the nursing process to assisting adaptation of the emerging family. The maternity cycle and child care from birth through adolescence are emphasized. The physiology and nursing care during the normal antepartal, labor, delivery, and postpartal periods as well as the needs of the normal newborn are presented. Some complications and deviations from normal are introduced. During child care, the etiology, treatment, and nursing care in common disorders and illnesses that affect the infant, child, and adolescent are presented. Objective-centered clinical experiences are planning using selected patients in obstetric and pediatric units within community settings. NUR 107 must be taken prior to or concurrently with NUR 104. Prerequisites: NUR 102 or by permission of the curriculum advisor.

NUR-107 Pharmacology (3-0-3)

Presents facts concerning sources, effects, legalities, and usage of drugs as therapeutic agents; a brief review of metrology, prescriptions of medications, drug classifications, and nursing implications are covered. Emphasis is placed on the nurse's responsibilities in relation to drug administration. Prepares the student to computer dosages and administer drugs. Practice opportunities are provided in classroom and in clinical areas. Prerequisite: MAT 145, NUR 102 or by permission of curriculum advisor.

NUR-108 Nursing Seminar I (2-0-2)

Presentation of the nurse's legal and ethical responsibilities; standards of nursing, nursing history, nursing organizations, and job opportunities are stressed. The Nurse Practice Act and its relation to legal practices and licenses is examined. The responsibilities and roles of practical and associate degree nursing are emphasized. Continuing education to improve nursing competencies is included. Prerequisites: NUR 103, NUR 104 or permission of curriculum advisor.

NUR-110 First Aid (3-0-3)

Instruction in accident prevention and emergency care, including CPR techniques. Stress immediate care of accident victims.

NUR-199 Nursing Transition (1-2-2)

Designed to facilitate the entry of the practical nurse graduate seeking advanced placement into the second year of Region A Nursing Consortium Nursing Education Options program. The focus of this course is directed toward assisting the practical nurse graduate to enter the second year of a program of preparation for the role of the registered nurse in current practice. Nursing theory will be presented and practice skills will be reviewed and supplemented to equate the level of mastery of the advanced placement candidate with the continuing generic student specifically in the areas of: nursing practice, nursing process, physical assessment, nursing diagnosis, nursing care planning, patient teaching, and documentation. Review and practice in calculating dosages and solutions, conversion of measurements, and determining appropriate dosages of medications/fluids will also be included. Successful completion of NUR 199 (minimum grade of C) is required for all advanced placement candidates prior to being accepted into the T-116 Nursing Education Options curriculum and must be updated biannually.

NUR-202 Medical-Surgical Nursing III (5-15-10)

This advanced Medical-Surgical Nursing course is a comprehensive study of biological, social, and emotional components of more complex problems of clients. Emphasis is placed on adaptive process and implementation of the nursing process within critical care settings. Aspects of nutrition, pharmacology, and patient teaching as they relate to the conditions studied are integrated throughout the course.

Complex disorders of the cardiovascular, urinary and renal, respiratory, and neurological systems are explored. Clinical Learning experiences are selected on the basis of the students' needs in order to meet the stated objectives. BIO 206 must be taken prior to or concurrently with NUR 202. Prerequisites: NUR 103, NUR 104, NUR 107 or by permission of curriculum advisor.

NUR-203 Medical-Surgical Nursing IV (5-15-10)

The study of bodily aberrations begun in NUR 202 is continued with emphasis placed on complex gastrointestinal disorders, endocrine, orthopedic, and integumentary disorders. Learning experiences are selected to assist the student in developing skills necessary to give comprehensive nursing care to patients in a variety of situations based on previously and concurrently acquired skills. The student is given the opportunity to plan, direct, and evaluate total patient care for individuals and groups to aid in preparation for the transition from student or practical nurse to professional staff nurse. Prerequisite: NUR 202, NUR 204, NUR 205, BIO 206 or by permission of curriculum advisor.

NUR-204 Advanced Maternal-Child Health Nursing (6-15-11)

Nursing 204 is designed to provide the student with theoretical knowledge in more complex client problems. Emphasis is on implementation of the nursing process in assisting adaptation of the family and/or individual to stressors created by complications and/or illnesses during the maternity cycle and/or growth and development of the child from conception through adolescence. Objective-centered clinical learning experiences are provided within the community setting. BIO 205 must be taken prior to or concurrently with NUR 204. Prerequisites: NUR 103, NUR 104 or by permission of curriculum advisor.

NUR-205 Psychiatric Nursing (5-15-10)

A study of the therapeutical role of the nurse in emotional or developmental disturbances in individuals. Implementation of the nursing process is emphasized in meeting the adaptiave needs of the client. This course includes mental health/illness continuum, personality identification, organic and functional clinical syndromes, therapeutic process, and community mental health resources. Clinical experience emphasizes observation and interpretation of overt and covert behavior within acute care facilities and mental health agencies. BIO 205 must be taken prior to or concurrently with NUR 205. Prerequisites: PSY 103, NUR 103, NUR 104, NUR 107 or by permission of curriculum advisor.

NUR-206 Nursing Seminar II (2-0-2)

Nursing 206 is concerned with relationships, opportunities, and responsibilities of the Registered Nurse in and to the nursing profession. Attention is given to transition from the role of student to graduate nurse. Consideration will be given to legal, ethical, and educational aspects of current nursing trends. NUR 203 must be taken prior to or concurrently with NUR 206. Prerequisite: NUR 203, NUR 204, NUR 205 or by permission of curriculum advisor.

NUT-101 Nutrition and Diet Therapy (3-0-3)

Designed to give practical 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. The mechanics and physiological processes of digestion, absorption, and metabolism are presented. Principles of meal planning and buying for nutritional requirements for all age groups modified by religious, cultural, social, and psychological factors are discussed. An introduction to the most commonly used hospital diets is included.

NUT-102 Nutrition and Health for Young Children (3-0-3)

Study of basic nutrition with emphasis on methods of helping young children and their families attain the basic nutrition concepts and the planning of balanced diets.

ORI-101 College Orientation (1-0-1)

This course is designed to assist students in establishing and successfully meeting academic goals. Areas addressed include college information, study skills, library skills, test taking skills, interpersonal skills, and time management.

PED-101 Weight Training (0-2-1)

Execution of various lifts; isotonic exercises; related health and safety factors.

PED-104 Adult Fitness (0-2-1)

An introduction to physical activity with emphasis being placed on the cardiovascular system, strength, and efficiency in executing basic skills which may arise in play and daily living.

PED-210 Basketball (0-2-1)
A course designed to teach the fundamental skills of basketball, along with the history, rules and strategy of the game.

PED-212 Volleyball (0-2-1)
A course designed to include the fundamental skills, history, rules and strategy of the game with special emphasis on carry-over value of activity.

PHI-101 Introduction fo Philosophy (3-0-3)
This course is designed to acquaint the student with the great original thinkers from Plato to modern philosophers.

PHY-101 Physics: Mechanics (3-2-4)
Conversion of units; vectors, translational and rotational equilibrium; kinematics; Newton's laws; analysis of motion; work, energy, and power; impulse and momentum; rotational kinematics and dynamics. Prerequisites: MAT 105, MAT 111 or equivalent.

PHY-102 Physics: Heat, Sound and Light (3-2-4)
Temperature; thermal energy; heat transfer; thermodynamics; waves; sound; light waves; refraction and reflection; lenses and mirrors; interferences and diffraction. Prerequisite: MAT 105 or equivalent.

PHY-103 Physics: Electricity and Magnetism (3-2-4)
Nature of electric charge; electric forces and fields; electric potential; capacitance; current, resistance and DC circuits; forces and torques in magnetic fields; electromagnetic induction. Prerequisite: MAT 105 or equivalent.

PHY-1101 Applied Science I (3-2-4)
An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY-1102 Applied Science II (3-2-4)
The second course in applied physical principles. Topics introduced are heat and thermometry and principles of force, motion, work, energy, and power. Prerequisite: PHY 1101.

PLU-1000 Basic Plumbing (2-6-4)
Plumbing repairs emphasized. Familiarization with the different types of pipes and fittings. The development of skills to provide the student with a knowledge to perform copper pipe sweating, handling of PVC pipe, replacement of water valves and faucets, and a familiarization with internal components of valves and faucets.

PLU-1101 Plumbing Pipework (5-15-10)
PLU-1101A Plumbing Pipework I (2-6-4)
PLU-1101B Plumbing Pipework II (3-9-6)
Introduction to the various types of plumbing tools, fittings, pipe and equipment used in the plumbing industry. The student will perform operations such as cutting, threading, caulking and soldering various kinds of pipe as required by the N.C. Plumbing Code Book.

PLU-1111 Domestic Hot and Cold Water Systems (5-15-10)
PLU-1111A Domestic Hot and Cold Water Systems I (2-6-4)
PLU-1111B Domestic Hot and Cold Water Systems II (3-9-6)
Introduction to hot and cold water systems for residential and commercial buildings. This course will cover the installation of water distribution systems beginning with the source of supply and including the locations of pipes, valves, and pumps in both single-story and multi-story buildings. Plumbing installations will be made to provide practical applications. N.C. Plumbing Code Book will be emphasized.

PLU-1112 Installation of Plumbing Fixtures (2-6-4)
The differences in materials and styles of lavatories, bathtubs, sinks, water closets, and the many ways that these fixtures can be installed, will form the basis of this course. The proper use of traps is included. The student will get actual practice by making installations.

PLU-1115 Drainage Systems: Residential (4-12-8)
PLU-1115A Drainage Systems: Residential (2-6-4)
This course will introduce students to the principles that govern the installation of sanitary drainage — soil and waste piping, vent piping, and storm drainage piping. Drainage system layouts and testing methods will be covered.

PLU-1116 Commercial Systems (5-15-10)
PLU-1116A Commercial Systems (1-3-2)
A study of the different types of drainage and venting systems that are installed in residential and commercial buildings. Procedures for layout and sizing of the piping systems as required by N.C. Plumbing Code will be covered.

POL-103 National, State and Local Government (3-0-3)
A study of the organization and functions of national, state, and local governments, intergovernmental relationships, and contemporary significant problems.

POL-104 Political Perspectives on Energy Use (2-0-2)
Amount and distribution of energy use in the U.S.; type and amount of remaining energy resources; available resources of direct and indirect solar energy; role of energy conservation in reducing demand; economic and political implications of energy use; potentials for local and regional energy resource utilization.

PSC-105 N.C. Basic Law Enforcement (16-24-24)
An extensive introductory course to provide the students with minimal skills toward employment as a law enforcement officer of the State of North Carolina.

PSY-102 Introduction to Psychology (3-0-3)
An introduction to the principles of psychology and their application to social, home, and work environments.

PSY-103 General Psychology (5-0-5)
A study of the various fields of psychology; the developmental process; motivation emotion; frustration and adjustment, mental health, attention and perception; problems of group living. Attention is given to application of these topics to problems of study, self-understanding and adjustment to the demands of society and the working world.

PSY-106 Applied Psychology (5-0-5)
Practice in problem solving, using mental imagery, applying critical thinking, analyzing the components of reasoning and valuing, and generating and evaluating solutions.

PSY-109 Human Relations (3-0-3)
Discussions concerning the interactions of people in all types of situations. Emphasis on interactions of people in subordinate positions as well as management positions.

PSY-203 Human Growth and Development (5-0-5)
A study of the basic principles of physiological and psychological growth states of the child from conception through adolescence. Emphasis is on personality development, theories, and influences of family size and structure.

PSY-204 Psychology of Aging (5-0-5)
A study of the social aspects of aging, health, and illness among the aged, with emphasis on working with older citizens.

PSY-240 Behavior Modification (5-2-6)
An introduction to the underlying assumptions, basic principles and techniques involved in behavior modification. A critical examination of behavior modification applied to various populations and across a wide range of conditions will be conducted in the course. Application of behavior modification principles and techniques is a necessary requisite of the course. Prerequisite: PSY 102.

RDT-105 Patient Care/Medical Ethics (3-0-3)
Nursing techniques and procedures are taught with an emphasis placed on aseptic technique, proper handling of the ill and injured. Also studies will be the legal and ethical obligations of the modern radiographer to student and the patient. Prerequisite: Acceptance into the program.

RDT-106 Pathophysiology (4-0-4)
Didactic lectures covering types of abnormalities encountered in specific disease states, ranges of normality from birth to senility including unusual varients, and activating procedures of EKG and EEG.

RDT-107 Positioning I (3-4-5)
This course is to provide instruction in the radiographic positioning of anatomical structures and organs of the body. This course shall provide precise and detailed information of the various positions and shall be supplemented with practical instruction and application in the radiographic room. Emphasis will be placed on chest, abdomen and basic contrast studies.

RDT-108 Positioning II (3-4-5)
A continuation of RDT 107. Procedures for positioning of the upper and lower extremities are included. The lecture will be supplemented with practical instruction and application in the radiographic room. Prerequisite: RDT 107.

RDT-109 Positioning III (3-4-5)

A continuation of RDT 108. Procedures for positioning of the cervical, thoracic, and lumbar spines. bony thorax and the structures of the cranium. Prerequisite: RDT 108.

RDT-110 Radiation Protection/Biology (3-0-3)

A study of radiation dosage, its effects on patients and personnel with the protective measures available and necessary. Also studies in basic cell structure, composition, and function and how they can be affected adversely by ionizing radiation. Prerequisites: BIO 102, BIO 205, BIO 206.

RDT-111 Clinical Education I (0-15-5)

Clinical Education I is designed to orient the student radiographer to the hospital setting and its procedures. Students will begin practical experiences such as: the application of ethical conduct, patient care procedures involving physical and emotional needs, basic radiation protection principles, and assistance/observation of patient positioning and radiographic exposures. Prerequisite: Acceptance into the program.

RDT-112 Clinical Education II (0-15-5)

A continuation of RDT 111. Clinical Education is designed to further and advance the students proficiency in the clinical setting. The student will make application of the theories implemental to them in lecture. There will be an emphasis in the areas of patient care procedures, exposure techniques and positioning. Prerequisite: RDT 111.

RDT-113 Clinical Education III (0-24-8)

A continuation of RDT 112. General radiographic skills, fluroscopy, common contrast studies and related activities are studied. Prerequisite: RDT 112.

RDT-115 Introduction to Radiologic Technology (2-0-2)

An orientation to radiologic technology. History of the professions, responsibilities of the technologist, professional development, basic radiation protection and areas of specialization are studied. Prerequisite: Acceptance into the program.

RDT-116 Principles of Exposure I (3-0-3)

Basic concepts concerned with the production and recording of the radiographic image, radiographic accessories and patient factors influencing radiographic exposures. Film processing and processing equipment are studied.

RDT-117 Principles of Exposure II (3-2-4)

A detailed study of factors involved in the production of radiographic qualities. Relationship of prime factors to radiographic quality and the influence and relationships of the primary factors, accessories, and patient factors to radiographic quality. Prerequisite: RDT 116.

RDT-201 Radiologic Physics I (3-0-3)

An introduction to radiologic physics into units of measurements, concents of energy, atomic structure, electrostatis, current electricity, electromagnetism, generators, motors and transformers.

RDT-202 Radiologic Physics II (3-0-3)

Operation of rectifiers and x-ray tubes, the production of x-radiation and its interaction with matter are studied. Also included is circuiting of x-ray machines. Prerequisite: PHY 107.

RDT-203 Film Critique (3-0-3)

A critical review of radiographic quality with reference to specific technical difficulties. This is a class demonstration by the student.

RDT-205 Special Procedures I (3-0-3)

A study of special studies and techniques used in the modern radiology department. This course is to acquaint the student with those specialized and highly technical procedures in radiography.

RDT-206 Special Procedures II (3-0-3)

A study of contrast media, including procedures, with an emphasis on special procedures and equipment for cerebral and vascular studies. Prerequisite: RDT 205.

RDT-210 Introduction to the Study of Disease (3-0-3)

General principles of pathology. A variety of disease processes and malfunctions will be studied, with emphasis on radiographic demonstration of disease.

RDT-215 Clinical Education IV (0-24-8)

A continuation of RDT 113. RDT 215 is designed to reinforce technical skills in fundamental radiographic procedures and develop a better understanding of more intricate procedures. Prerequisite: RDT 113.

RDT-216 Clinical Education V (0-24-8)
A continuation of RDT 215. The student is taught to assume increasing levels of responsibilities, including bedside, pediatric and operating room radiography. Prerequisite: RDT 215.

RDT-217 Clinical Education VI (0-24-8)
A continuation of RDT 216. The student will begin initial observation and participation in special procedures. Prerequisite: RDT 216.

RDT-218 Clinical Education VII (0-36-12)
A continuation of RDT 217. Introduction of concepts of other imaging modalities in Radiology. Students will be expected to prove final competency in all areas of general radiography. Prerequisite: RDT 217.

RDT-237 Radiologic Technology Project (4-0-4)
Completion of a project or research report related to the study of approaches to the selection and pursuit of career opportunities in the field.

RDT-238 Radiologic Technology Seminar (3-0-3)
A review of major topics in radiology, in order to prepare the student for certification. Comprehensive final exam over all areas of radiography is included.

REC-100 Recreation Activities I (0-10-3)
A study of indoor recreational activities, such as basketball, volleyball, badminton. Will stress rules and regulations.

REC-101 Recreation Activities II (0-10-3)
A continuation of REC 100; also includes outdoor group activities.

REC-108 Introduction to Recreation (3-0-3)
Designed to introduce the history and fundamentals of organized recreation services, major program areas, organizations special agencies and institutions which serve the recreation needs of our society.

REC-110 Recreation Activities (3-2-4)
Learning of organization and supervision of recreation activities with emphasis on trends, terminology, and skills. Activity areas to be covered include social, sports, cultural, and special events. Each area will be applied to the separate age groups.

REC-113 Music Therapy (2-6-5)
A course designed to develop an understanding of the use of music for recreational the therapeutic purposes. Teaching techniques are included in the course.

REC-115 Therapeutic Crafts I (3-6-6)
Develops the students' understanding of the use of crafts in the institutional setting. Labs to accompany the classes include basketry, pottery, candlemaking, and others.

REC-116 Therapeutic Crafts II (3-6-6)
A continuation of Therapeutic Crafts I, with an emphasis on techniques used for teaching crafts.

REC-120 Social Recreation Leadership (2-2-3)
This course is designed to teach group dynamics and group leadership techniques, and encompasses the general principle of sociological theory.

REC-134 First Aid and Safety (1-2-2)
Prevention of accidents, standard and advanced courses as organized by the American Red Cross. Safety precautions in various recreational areas and situations.

REC-145 Aerobic Conditioning I (0-2-1)
Designed to introduce to the individual the necessity of cardiovascular conditioning and to facilitate overall body conditioning. Target heart rate, maximum heart rate and working heart rate will be assessed for each student.

REC-146 Aerobic Conditioning II (0-2-1)
Includes aerobic conditioning for heart and lungs. Injury prevention and basic physiology will also be included.

REC-147 Aerobic Conditioning III (0-2-1)
Routines to strengthen specific muscle groups and to tone and increase overall body fitness, flexibility and coordination.

REC-150 Aerobics for the Older Adult (0-4-2)
A course designed to teach the proper methods for exercising for older adults. An emphasis is placed on techniques of exercising without creating undue stress to the body.

REC-201 Principles of Supervision in Recreation (5-0-5)
An introduction to the duties and responsibilities of the supervisor in a recreational setting. Methods of supervision are stressed.

REC-202 Recreation for Special Populations (3-4-5)
A study of useful and creative recreational activities in the institutional settings, such as rest homes, hospitals, and clinics.

REC-203 Outdoor Recreation (2-6-5)
The study of recreational activities in an outdoor setting. Alternative methods of exercise are included.

REC-204 Special Topics in Recreation (0-10-5)
A course designed for the advanced student, in which a particular aspect of recreation is given concentration. Topics of study at the discretion of the instructor.

REC-249 Leadership Techniques in Recreation (5-0-5)
Leadership in various fields of recreation, analysis of factors associated with it, and techniques of leadership. Stresses proper use of leadership roles in specific recreation situations.

REC-250 Recreation Programming (3-2-4)
Study of the major program areas in recreation. Examine types of recreation opportunities available to individuals and groups and the modern methods of providing these opportunities.

REC-259 Recreation Administration (5-0-5)
The administration process and responsibility in recreation. Topics will be organization, policy, personnel, planning, public relations, evaluation, research and more.

REC-266 Special Recreation (3-0-3)
An overview of special populations in recreation. Discussion on problem solving, leadership techniques, and meeting the recreational needs of special populations in the community will take place.

RTH-101 Orientation to Respiratory Therapy (3-6-5)
The student is introduced to the hospital setting and the department of respiratory therapy. Major topics include medical terminology, infection control, patient positioning, body mechanics, medical-legal aspects, and patient charting.

RTH-103 Cardiopulmonary Physiology (4-2-5)
Concentrated study of the heart, peripheral circulation, and respiratory system. Labs to accompany specific topics. Prerequisite: BIO 102.

RTH-104 Cardiopulmonary Rehabilitation (1-0-1)
A course designed to provide the student with a working knowledge of the pulmonary and cardiovascular system in relationship to cardiopulmonary rehabilitation of the pulmonary patient. Prerequisite: RTH 103, RTH 101.

RTH-105 Theories and Principles I (4-2-5)
A study of properties of gases, pressure differentials, and ventilation control. Theories and principles of oxygen, aerosol administration, and types of breathing therapies are discussed. Cleaning and sterilization of equipment will also be covered.

RTH-106 Pathophysiology (4-0-4)
Didactic lectures covering types of abnormalities encountered in specific disease states, including language normality from birth to senility. Prerequisite: RTH 103.

RTH-107 Microbiology for Respiratory Therapy (3-4-5)
A course designed to provide an understanding of microbiological principles and applications as they apply to the pulmonary patient. Laboratory sessions cover classifications, epidemology, and symptomology, as well as sterile procedures.

RTH-108 Theories and Principles II (1-2-2)
Topics covered include positive pressure ventilation and respiratory care of the medical-surgical patient, as well as the effects of anethesia on the surgical patient. Prerequisite: RTH 105.

RTH-109 Pharmacology (2-0-2)
A study of effects, contraindications, and use of major classes of drugs. Special emphasis is placed on drugs which affect the respiratory system and autonomic nervous system.

RTH-111 Clinical Experience I (0-15-5)
The student will assist respiratory therapy personnel in the performance of various duties to include oxygen, humidity, and aerosol

therapy. Maintenance and clearing of equipment will be stressed. Prerequisite: RTH 101.

RTH-112 Clinical Experience II (0-18-6)
A continuation of RTH 111, including oxygen, aerosol, and humidity therapy. New topics include 1PPB therapy, spontaneous nebulizer therapy, and incentive spirometry. Prerequisite: RTH 111.

RTH-113 Clinical Experience III (0-18-6)
A continuation of RTH 112. The student will gain experience in chest physiotherapy and blood gas analysis. Prerequisite: RTH 112.

RTH-201 Ventilators (2-2-3)
A course covering ventilator care, with emphasis placed on maintenance, assembly, and operation. Prerequisite: RTH 108.

RTH-202 Intensive Respiratory Care (3-0-3)
A course designed to cover intensive respiratory care with topics to include airway control, physical diagnosis, and mechanical ventilation. Prerequisite: RTH 106.

RTH-203 Pediatrics (2-0-2)
The anatomy and physiology of the pediatric patient will be covered with a discussion of disease processes in the neonate and pediatric patient. Critical care of these patients will be stressed. Prerequisites: RTH 106, RTH 201, RTH 202.

RTH-204 Pulmonary Function (3-0-3)
A course designed to acquaint the student with a comprehensive knowledge of diagnostic pulmonary function testing. Indepth theory, calculation, and interpretation will be covered. Prerequisite: RTH 106.

RTH-216 Clinical Experience IV (0-18-6)
A continuation of RTH 113. The students will gain clinical experience in intensive respiratory care to include experience in continuous mechanical ventilation. Prerequisite: RTH 113.

RTH-217 Clinical Experience V (0-18-6)
A continuation of clinical experience covered in RTH 216, plus experience in neonatal intensive care, care of the pediatric patient, intensive care of the pediatric patient, and pulmonary function testing. Prerequisite: RTH 216.

RTH-218 Clinical Experience VI (0-27-9)
The student will gain further clinical experience in areas covered in previous clinical courses, and will be introduced to respiratory and hemodynamic monitoring techniques. Critical care will be stressed. Prerequisite: RTH 217.

RTH-220 Respiratory Therapy Department Operations (1-0-0-1)
A course designed to cover all aspects of management of a respiratory therapy department, including space requirements, budget planning, equipment purchase, and personnel management. Prerequisite: RTH 217.

RTH-224 Respiratory and Hemodynamic Monitoring Techniques (2-2-3)
This course is designed to give the student a broad background and understanding of the various respiratory and hemodynamic monitoring modalities in use today, including acterial and venous pressure monitoring, Swan-Ganz Caterization, medical mass spectometry, and equipment calibration techniques. Prerequisites: RTH 204.

RTV-116 Broadcasting Announcing (3-2-4)
A study of the announcer's function, skills, characteristics and techniques with emphasis on the analysis, interpretation and communication of a variety of types of announcing-performance projects. The course is further designed to familiarize the student with basic broadcast studio equipment and broadcast procedures.

RTV-120 Control Room Procedures (3-2-4)
Familiarizes the student with the operation of the TV control room and its equipment; deals with VTR's monitors, character generators, timebase correctors, switchers, camera control units, audio mixers and their interconnection. Students will polish editing skills and improve their knowledge of production in the studio.

RTV-201 Introduction to Broadcasting (5-2-6)
A survey course of radio and television broadcasting including history and development; station organization and procedures; and a practical introduction to the fundamentals of announcing, copy writing, production, promotion, programming, sales and administration.

RTV-202 Sales and Promotion (3-0-3)
This course traces the history of broadcast advertising and the structure of the present-day industry. It deals with specific procedures for developing broadcast advertising campaigns. Buying and selling time in radio, television and cable is examined in detail. Controversies and criticisms surrounding broadcast advertising are discussed.

RTV-203 Expression in the Media (5-0-5)
A students learn to express themselves clearly, quickly, and to the point. A must for anyone in the communications field.

RTV-204 Radio Production (2-6-5)
Creation, development, production, and presentation of broadcast anouncements, interviews, commercials and dramatic program material with emphasis on the proper use of equipment to achieve effective idea communication.

RTV-205 Broadcast Programming (3-0-3)
Trends and requirements of broadcast programming. An analysis of community program needs and tastes, station image, and the effect of self-regulatory codes on broadcasting.

RTV-206 Writing for Broadcasting (3-0-3)
An introductory course in writing for the broadcast media. Including fundamental writing techniques, commercials, public service announcements and news. Prerequisite ENG 101 or permission of Instructor.

RTV-207 Television Production I (2-10-7)
An introduction to the elements of television; camera operation, use of microphones, lighting and some control room techniques.

RTV-209 Television Production II (2-10-7)
Advanced work in producing and directing television programs.

RTV-211 Broadcast Journalism (5-4-7)
An introduction to the field of broadcast journalism with special emphasis on the gathering, writing, delivery, editing and processing of news.

RTV-212 Broadcast Management (3-0-3)
The problems of managing a radio or television station stressing the social, economic, and legal responsibilities of a broadcast operation.

RTV-213 Station Operations I (0-10-3)
Operation of the College radio station.

RTV-214 Station Operations II (0-10-3)
Operation of the College television production facilities.

RTV-215 Station Management I (0-4-1)
Management of WSCC, the College radio station.

RTV-216 Station Management II (0-4-1)
Management and operation of the College television production facilities.

RTV-218 Broadcast Law (3-0-3)
The laws and regulations governing broadcasting, with a working knowledge of the relationship of governing agencies, such as Congress, committees, courts and the FCC. Historical and current developments in rules and regulations, law and self-regulation are examined.

RTV-220 Introduction to Television Systems (5-4-7)
Students become familiar with television telecasting and receiving equipment including cameras, VTR's (consumer and commercial), Eng. transmitters, film chains, switchers, receivers, character generators, computers, video processors, processing amps, test signals, dropout compensators, projectors, and tally lights.

RTV-221 Troubleshooting Broadcast Equipment (3-2-4)
Troubleshooting and appreciation of broadcast equipment. Includes a basic understanding of studio equipment, schematics, and flow chart review. General repairs on common studio equipment found in radio and television stations.

RTV-227 Broadcast Field Training (0-40-4)
During the seventh quarter students will work in a broadcast or communications facility for a minimum of 40 hours a week. The objective is to provide actual work experience for broadcasting students and the practical application of the skills and knowledge previously learned. Prerequisite: all course requirements of the first six quarters or approval of the curriculum head.

RTV-229 Special Projects (0-18-6)

During the seventh quarter students may choose to gain experience on campus at SCC by producing special projects which may include instructional tapes, public service announcements, programs for SCC's Channel 5, and commercials, thus providing actual work experience and practical application of skills and knowledge. Prerequisite: all course requirements of the previous six quarters or approval of the curriculum head. Students will be supervised by the faculty.

RTV-243 Public Relations and the Media (5-0-5)

Students learn the historical development of the public relations profession how to identify target audiences; how to deal with public opinion; how to choose the right message and medium; dealing with the media during emergencies; news releases and timing; PR campaigns; PR and the law; the ethics of public relations.

SCI-101 General Science (3-2-4)

Study of basic concepts from biological, physical and natural sciences. Laboratory experiences provide opportunities to develop projects for demonstrating simple science concepts to young children, utilizing materials from nature and simple equipment. Each student will develop a series of projects appropriate for a specific level of development.

SOC-101 Introduction to Sociology (3-0-3)

An examination of the fundamental concepts and general principles of sociology, including the evolution of human culture, socialization, interaction, social groups and stratification, effects of populations growth and technology on society and social institutions.

SOC-102 Principles of Sociology (5-0-5)

A study in the principles of sociology, providing an understanding of culture, collective behavior, community life, social institutions and social change. Presents the scientific study of man's 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.

WLD-1101 Basic Welding (1-3-2)

Introduction to the history of oxyacetylene and arc welding, the principles of welding and cutting, nomenclature of the equipment and different types of welding, brazing and soldering processes. Welding procedures such as practice or puddling and carrying the puddle, running flat beads, butt welding in the flat position, and cutting of ferrous metals with the torch. Safety procedures are stressed throughout the program of instruction.

WLD-1102 Oxyacetylene Welding and Cutting (6-18-12)

Introduction and practical operations in the set up and use of oxyacetylene welding equipment. Welding procedures such as practice of making welded joints in the flat, horizontal, vertical and overhead positions are stressed throughout the program of instruction. Safety in the assembly and operation of equipment and worksite will be stressed.

WLD-1106 Pipe Welding and Test Procedures (6-18-12)

A continuation of WLD 1108 and WLD 1112. Introduction and practical operations in welding pressure pipe in the vertical fixed and horizontal fixed positions following the certification procedures of section IX of the American Society of Mechanical Engineers (AMSE) boiler and Pressure Vessel Codes. Prerequisites: WLD 1108, WLD 1112.

WLD-1108 Arc Welding (5-18-11)

Introduction to arc welding, the principles of welding and nomenclature of the equipment, assembly of unit. The operation of various AC transformers, AC and DC rectifiers, and DC motor generator arc welding units. Welding procedures such as practice of running beads and welding various structural joints in the flat, horizontal, vertical and overhead positions.

WLD-1110 Metallurgy (3-0-3)

An introduction course in metallurgy; emphasizing the properties and manufacturing of metals, the purpose of heat treatment, annealing, hardening, and tempering.

WLD-1112 Advanced Arc Welding and Inert Gas (4-15-9)

A continuation of WLD 1108. Introduction and practical operation in the use of Tungsten Inert Gas (TIG) and Gas Metal Arc (MIG) welding. Methods applicable to general repair and open butt welding in the flat, horizontal, vertical and overhead positions will be performed. Prerequisite: WLD 1108.

WLD-1114 Practical Shop: SMAW Welding (Certification Procedures) (0-18-6)

This program is designed to provide the student with the opportunity to extend their skills in welding through minimum supervision. The student will practice making weldments in all positions on both plate and pipe. Through the use of the shielded metal are welding methods, experience can be gained toward certification as required by the American Society of Mechanical Engineers (ASME — boiler and pressure vessel code.) Prerequisites: Previous work experience or welding school training.

WLD-1115 Practical Shop: Inert Gas Welding (Certification Procedures) (0-18-6)

This program is designed to provide the student with the opportunity to extend their skills in welding through minimum supervision. The student will practice making weldments in all positions of both plate and pipe. Through the use of Gas Tungsten (TIG) and Gas Metal (MIG) welding methods, experience can be gained toward certification as required by the American Society of Mechanical Engineers. (ASME — boiler and pressure vessel code). Prerequisites: Previous work experience or welding school training.

WLD-1117 Structural Welding: Certification Procedures (2-6-4)

The course is structured to provide the student with additional experience in welding techniques and procedures. Flexibility is provided to afford the student the opportunity to strengthen his/her ability in a chosen area of welding certification.

FACULTY AND STAFF

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JAMES E. CAMPBELL.....Executive Dean for Academic and Student Affairs
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M.In.Ed., Clemson University

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BBA, University of Miami
J.D., University of Miami

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MARK BUCHANAN.....Maintenance/Shipping-Receiving Clerk

MICHAEL BUCHANAN.....Automotive Mechanics
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SANDRA BUNN.....Secretary

DONNIE BURRELL.....Maintenance Mechanic

JACK CABE.....Computer Programmer

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JAMES CARPENTER.....Maintenance

RAY CARPENTER.....Maintenance

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JUDY FRANKLIN.....Duplicating Technician/Library Clerk

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M.S., Clemson University

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M.S.N., Medical College of Georgia

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Western Academy of Hair Design

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M.A., Western Carolina University

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YORK PAINTER.....Carpentry

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Pack Square School

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ELLEN WEEKLEY.....Human Resource Development
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M.A., Western Carolina University

NANCY WHEATLEY.....Secretary
A.A.S., Southwestern Community College

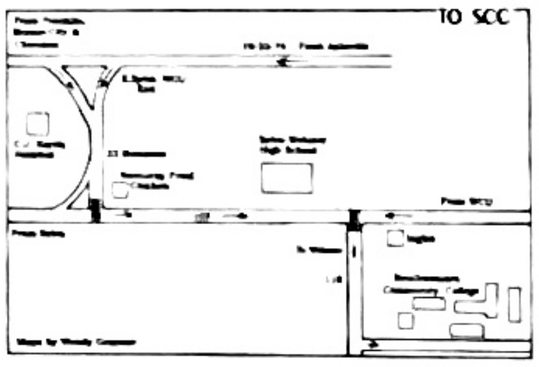
LAURIE WILSON.....Secretary
A.A.S., Southwestern Community College

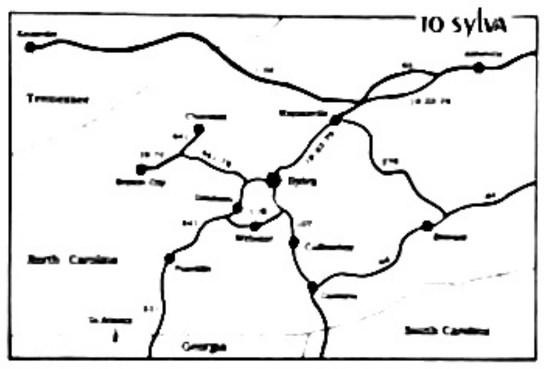
DENNIS WILKEY.....Assistant Coordinator of Maintenance

STEVE WILSON.....Maintenance



CAMPUS MAP





Learning Resources Center Building

Staff

walkway

Trades Center Building

Parking D

Technical Building

Staff

Parking C

Services Building

Vocational Building

Staff

Parking B

Parking B

Maintenance Building

WNC Allied Health & Geriatric Center Building

Parking A

Bookstore (3rd Floor) A.H. Bldg.
Admissions Office (1st Floor) A.H. Bldg.
Registrar (1st Floor) A.H. Bldg.
Business Office (1st Floor) Tech. Bldg.
Instructional Administration (3rd Floor) Serv. Bldg.
Auditorium (1st Floor) A.H. Bldg.
Multi-purpose Room (2nd Floor) Serv. Bldg.
Dining Room (1st Floor) Serv. Bldg.
Continuing Education (1st Floor) Voc. Bldg.
Personnel Office (1st Floor) A.H. Bldg.
Presidents Office (1st Floor) A.H. Bldg.
Public Information (1st Floor) A.H. Bldg.

To Hwy. 107
Cullowhee & Sylva

Hwy. 116
To Webster & Franklin

SOUTHWESTERN COMMUNITY COLLEGE

Revised 12/87



SOUTHWESTERN COMMUNITY COLLEGE
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