

SOUTHWESTERN COMMUNITY COLLEGE

ACADEMIC CATALOG

1990 - 93

SOUTHWESTERN COMMUNITY COLLEGE
SYLVA, NORTH CAROLINA

CATALOG 1990-1993

AN INSTITUTION
OF
THE NORTH CAROLINA DEPARTMENT
OF COMMUNITY COLLEGES

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Mailing Address:

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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 1990-91

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

1990
FALL QUARTER
55 DAYS

Registration and Student Orientation.....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 8-9
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 Day.....Monday, 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

COLLEGE CALENDAR 1991-92

FALL QUARTER
1991
55 DAYS

Professional Development Day	Tuesday, September 3
Registration	Wednesday, September 4
First Day of Classes	Thursday, September 5
Quarter Ends	Wednesday, November 20

1991-92
WINTER QUARTER
55 DAYS

Registration	Monday, December 2
First Day of Classes	Tuesday, December 3
Holiday Recess	Monday, December 23 - Friday, January 3
Martin Luther King Day	Monday, January 20
Quarter Ends	Tuesday, March 3

1992
SPRING QUARTER
55 DAYS

Registration	Monday, March 9
First Day of Classes	Tuesday, March 10
Easter Break	Friday-Monday, April 17-20
Memorial Day	Monday, May 25
Quarter Ends	Thursday, May 28
Commencement	Thursday, May 28

1992
SUMMER QUARTER
50 DAYS

Registration.....Monday, June 8
First Day of Classes.....Tuesday, June 9
Independence Day Break..... Friday-Friday, July 3-10
Quarter Ends ..... Tuesday, August 25
Commencement ..... Tuesday, August 25

1992
FALL QUARTER
55 DAYS

Registration Day .....Thursday, September 3
Professional Development Day .....Friday, September 4
First Day of Classes .....Tuesday, September 8
Community College Faculty Workshop ..... Monday - Tuesday, October 12-13
Quarter Ends .....Wednesday, November 25

1992-93
WINTER QUARTER
55 DAYS

Registration.....Tuesday, December 1
First Day of Classes .....Wednesday, December 2
Holiday Recess.....Monday, December 21 - Friday, January 1
Martin Luther King Day .....Monday, January 18
Quarter Ends ..... Wednesday, March 3

1993
SPRING QUARTER
55 DAYS

Registration..... Monday, March 8
First Day of Classes ..... Tuesday, March 9
Easter Break.....Friday, April 9 - Monday, April 12
Memorial Day .....Monday, May 24
Quarter Ends ..... Thursday, May 27
Commencement ..... Thursday, May 27

1993
SUMMER QUARTER
50 DAYS

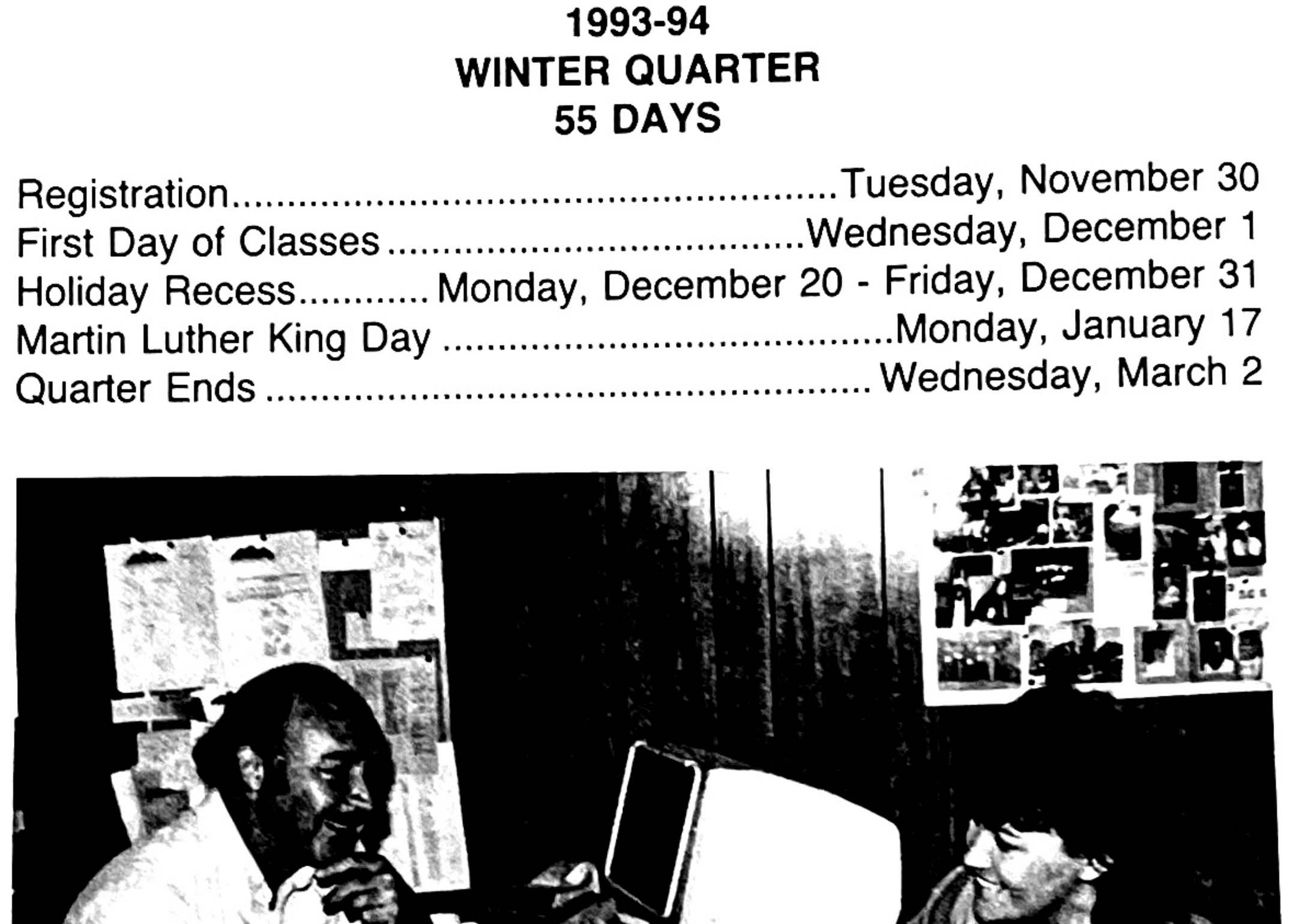
Registration.....Monday, June 7
First Day of Classes .....Tuesday, June 8
Independence Day Break..... Friday, July 2 - Friday, July 9
Quarter Ends .....Wednesday, August 25
Commencement .....Wednesday, August 25

1993-94
FALL QUARTER
55 DAYS

Professional Development Day ..... Tuesday, September 7
Registration and Student Orientation ..... Wednesday, September 8
First Day of Classes ..... Thursday, September 9
Quarter Ends ..... Wednesday, November 24

1993-94
WINTER QUARTER
55 DAYS

Registration ..... Tuesday, November 30
First Day of Classes ..... Wednesday, December 1
Holiday Recess ..... Monday, December 20 - Friday, December 31
Martin Luther King Day ..... Monday, January 17
Quarter Ends ..... Wednesday, March 2



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 celebrated 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 the wide variety of instructional programs offered by the College. The Learning Resources Center, completed in 1983, houses the College library and the media production center.

During 1988 the College took occupancy of the Regional Allied Health and Geriatric Training Center. Built to provide the training needs in allied health programs that are projected to be in increasing demand, the Center houses modern high tech equipment in the finest laboratory environments.

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

Dortha McDonald
Sylva 1994

Charles Jerry Sutton
Franklin 1990

Mary Jane Ferguson
Cherokee 1992

W. Calvin Myers
Bryson City 1993

County Commission Appointment

Robert Blanton
Whittier 1990

Catherine H. Dillard
Cullowhee 1991

Charles Siler Slagle
Franklin 1992

Robert C. Carpenter
Franklin 1993

Board of Education Appointment

William J. Cowan
Webster 1994

W. Paul Holt, Jr.
Sylva 1992

William H. Smith
Sylva 1991

Jeanne Sneed
Bryson City 1993

Student Representative

President of Student Government Association

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 National Honorary Scholastic Fraternity, and a wide range of student activities.

Along with degree 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.

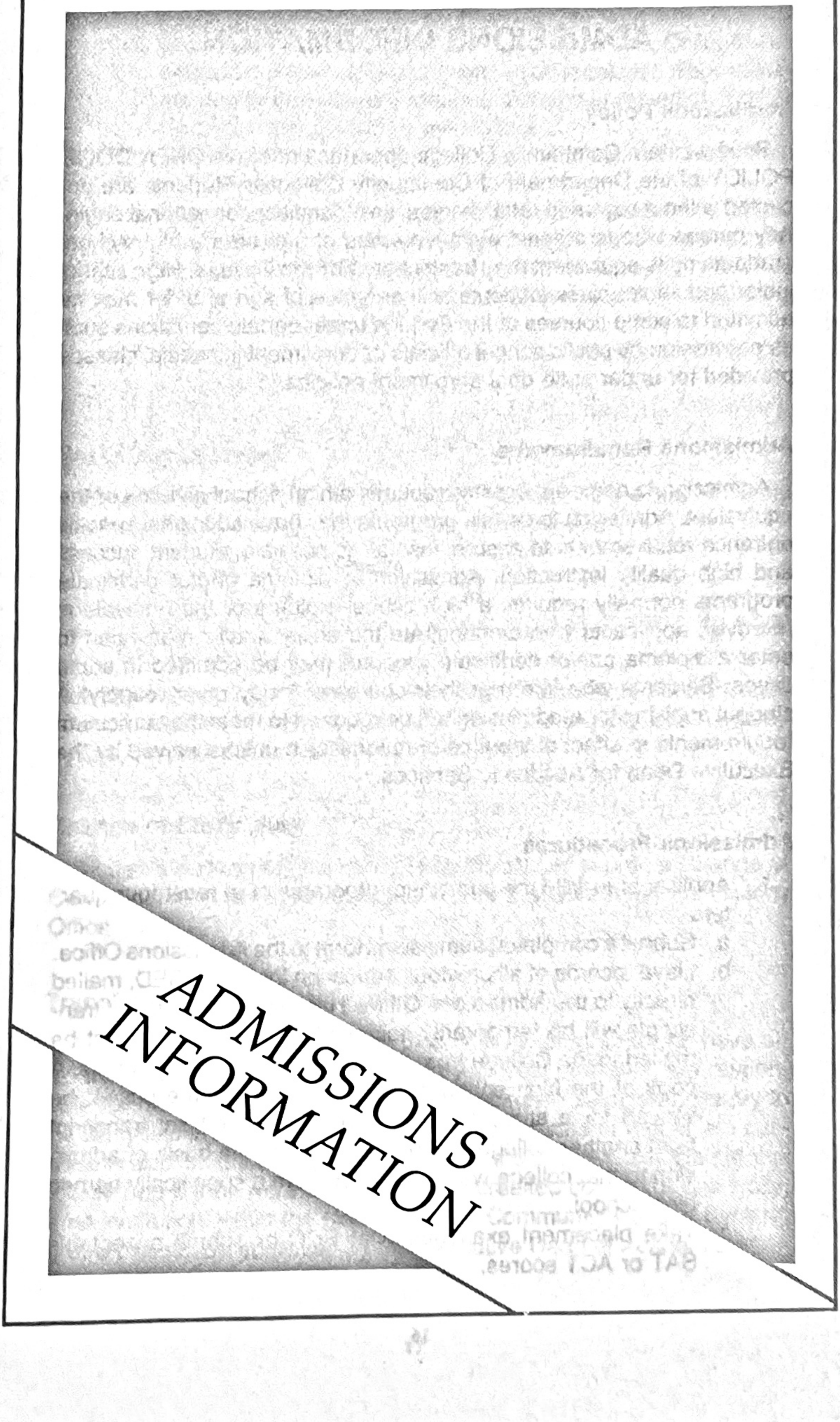
Norman K. Myers
President

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, provides appropriate, economical and convenient learning opportunities for the citizens of Jackson, Macon, and Swain counties and people of southwestern North Carolina. Depending on individual needs and previous education, these opportunities include basic literacy skills, vocational, technical, general adult and continuing education and Associate Degree programs permitting transfer to baccalaureate institutions.

Southwestern Community College provides accessible education delivered in a positive and supportive learning environment. The College's commitment to comprehensive education is enhanced through an array of academic and support services including personal counseling, career planning and job placement. The College's array of programs, courses, activities and services prepare individuals to join the labor market as employees, qualify them for employment in new and existing industry, provide specific skills training, and encourage personal improvement, self-satisfaction, and an understanding of the responsibilities and privileges of citizenship.


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. 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 state dual enrollment policies.

Admissions 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 and/or certificate program may be admitted in some cases. Students who interrupt their course of study must reapply. A student applying for readmission will be required to meet the curriculum requirements in effect at the time of readmission unless waived by the Executive Dean for Academic Services.

Admissions Procedures

1. Applicants to full-time curriculum programs of at least four quarters
   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 acceptable 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, audit, or to programs of less than four quarters.
   a. Submit a completed admission form to the Admissions Office.
   b. Students desiring to take English or mathematics classes must take the placement examination, submit acceptable SAT or ACT scores, or show evidence of successfully completing courses at another college.

   NOTE: An application form can be found inside the back of this catalog.

Readmission Policy

Students withdrawing from the College for one or more quarters must complete the following requirements prior to registration:

(a) Application for readmission
(b) Approval of Director of Admissions
(c) Residency classification if one year or more has elapsed since last enrollment.

A student applying for readmission will be required to meet the curriculum requirements in effect at the time of readmission unless waived by the Executive Dean for Academic Services.

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 to 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 Services.

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

Among the North Carolina colleges and universities which accept credits from SCC are:

Western Carolina University
Appalachian State University
University of North Carolina at Asheville
Mars Hill College
Fayetteville State
North Carolina School of Arts
University of North Carolina at Charlotte
University of North Carolina at Wilmington
Belmont Abbey College
Catawba College
Elon College
Gardner-Webb College
Greensboro College
Mount Olive College
Saint Augustine's College

Licensing of Graduates

Southwestern Community College is an educational 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 desired 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 Division Chairman or 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. (Veteran students, two 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 received "D" or "F" grades. (Exception to this policy on courses which may be taken while on suspension will be made with the approval of the appropriate Associate Dean or Division Chairman). 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 ratio 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 Assistant Dean for Records and Student Financial Aid.

Registration

Registration is held each quarter on the day published in the academic calendar. Registration procedures are prepared and distributed quarterly by the Assistant Dean for Records and Student Financial Aid.

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 Division Chairman or Director. Registration after the class 20% point must be approved by the Executive Dean for Academic Services.

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 Assistant Dean for Records and Student Financial Aid.

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 it to the office of the Assistant Dean for Records and Student Financial Aid.

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 or general education curriculum. A minimum of 96 quarter hours of credit is required for a degree.

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). A minimum of 64 quarter hours of credit is required for a diploma.

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. A minimum of 16 quarter hours of credit is required for a certificate.

Cooperative Education

In keeping with its policy of offering exciting, new and enriching opportunities for students, the College awards academic credit for cooperative work experience in many of its curricula. 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 educated career choices, and to earn money while going to college. Interested students should contact the Co-op Coordinator for more information.

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 only with the approval of the Executive Dean for Academic Services.

Course Substitution

When it is determined to be in the best interest of the student's declared educational objective, appropriate courses may be substituted for other courses for graduation purposes. Necessary course substitutions within the major field (courses reflecting the prefix of the student's major curriculum) require the approval of the student's advisor and the Division Chairman. Course substitutions from curriculums outside the student's major area, which have been made for the purpose of addressing the general education or related course requirements, must also be approved by the Executive Dean for Academic Services. The signatures of the advisee, advisor, and other approving officials must be on the substitute agreement.

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 Points per Quarter 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 during the first two weeks of the following quarter 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 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 Services.)	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 stop attending 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 "Credit by Exam" unless otherwise approved by the Executive Dean for Academic Services.	0
P	Passing. Awarded upon successful completion of a Continuing Education Course, where CEU credit is involved; 80 percent attendance is required.	0

Midterm Progress Report

A midterm progress report will be issued to students not demonstrating satisfactory progress. The following grade information will be used:

F	You have a failing grade average which will result in an "F" if uncorrected.
W	Withdrawal
U	Your grade average is borderline and needs improvement to insure a passing grade.
NA	Never attended

Waiver for Basic Typing and Shorthand Courses

If a student successfully challenges or passes an advanced typing or shorthand course, the advisor, with the instructor's approval may initiate the necessary documentation indicating exemption and credit for the appropriate lower-level courses.

Repeating Courses

Curriculum 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 Executive Dean for Academic Services. 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 be shown on the transcript and will not be included in the cumulative grade point calculations.

Continuing Education Courses

Students may enroll in continuing education courses as many times as necessary to accomplish their individual educational/training goals provided they continue to show progress, do not prohibit others from participating, are willing to pay fees, and do not violate North Carolina Department of Community College policy. Continuing Education programs/courses are designed to enable participants to progress, at their individual achievement rates, in gaining knowledge and skills in specific educational areas.

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. NA,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. NA, 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. The Assistant Dean for Records and Student Financial Aid ranks the candidates for Associate Degrees or Diplomas according to their cumulative 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 Assistant Dean for Records and Student Financial Aid, 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 Assistant Dean for Records and Student Financial Aid 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.

Part-time students enrolled in degree, diploma, or certificate programs will be eligible to participate in the Honors Banquet if they meet the following criteria:

- completed a minimum of 24 credit hours of coursework.
- been enrolled for three consecutive quarters including the quarter in which the Honors Banquet is held.
- maintain a minimum cumulative QPR of 3.5.

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 scholarship and leadership among Community/Junior College students. To achieve this purpose, Phi Theta Kappa provides opportunity for the development of leadership and service. . . for an intellectual climate for exchange of ideas and ideals. . . for lively fellowship of 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 quality point ratio 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 the advisory program is to provide each student with personal assistance in orientation and with guidance as he/she 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/she believes he/she already has mastery of the course material. Permission for such an examination must be obtained from the appropriate Division Chairman.

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 Programs, 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 to meet residency requirements.

Application for Commencement

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

Candidate's responsibility is as follows:

1. Obtain Application for Commencement at the Assistant Dean for Records and Student Financial Aid office.
2. Complete candidate's section of the application.
3. Pay commencement fee at the College Bookstore and all debts owed to the College at the Cashier's Office.
4. Take application to advisor.

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

Candidates for commencement are required to participate in commencement exercises if they wish to receive their degree, diploma, or certificate.

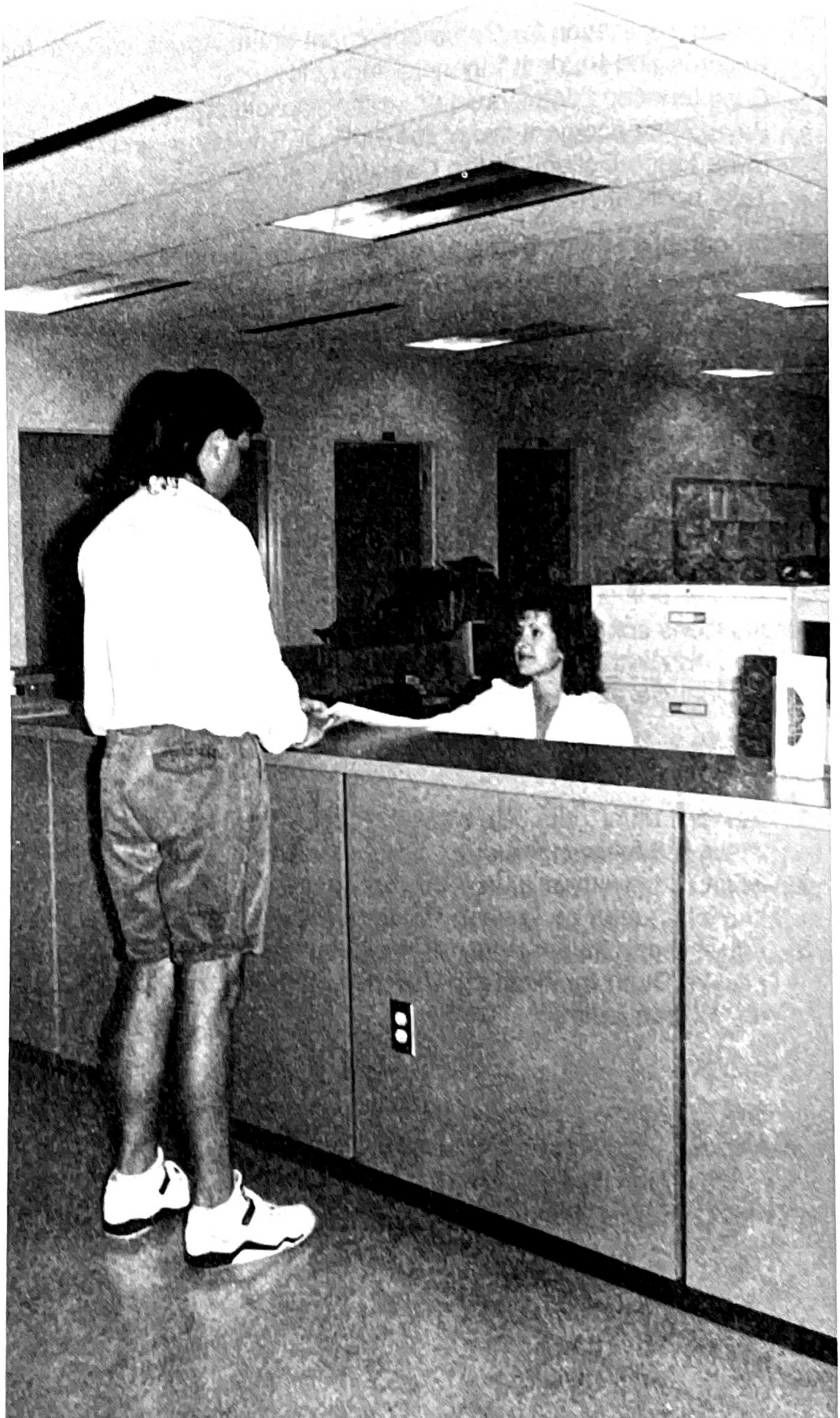
Student Record Policy

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 Assistant Dean for Records and Student Financial Aid.

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 supervising dean or Division Chairman. If not resolved -
3. (Final Step) Student may then appeal his/her grade to the Executive Dean for Academic Services. The decision of the Executive Dean is final.



STUDENT SERVICES AND STUDENT LIFE

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 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 knowledge of the College rules and regulations as set forth in the College Student Handbook.

Orientation

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 for Community Colleges of The College Board e.g. Reading Comprehension; Written Expression; Computational Mathematics and, for certain programs, Elementary Algebra.) The following majors must pass an allied health admissions test: Nursing Education Options, Medical Laboratory Technology, Radiologic Technology, Respiratory Care Technology, and Physical Therapist Assistant. 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 allied health admissions tests.

Student Development Center

The role of the Student Development Center is to provide academic assistance and support services for the student. The Center is designed to incorporate the student's entire educational process into the best possible experience. Through placement testing and academic advising, the student is directed into a program track to meet needs, interests, and goals in a successful way. The Center is located in the Technical Building on the second floor, room 105C.

Counseling

Career counseling as well as personal and academic counseling is available in Student Services and county attendance centers. Counselors frequently act as a referral service for problems as diverse as housing, child care and tutoring needs. All counseling is confidential. A peer tutoring program is available free to individual students experiencing difficulty in most academic areas.

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 the Placement Office Resume Service must submit their resumes no 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, 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 with 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. Members of the Student Government Association serve 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, and trips. Clubs exist in the areas of Electronics, Paralegal, Respiratory, Electrodiagnostics 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 NCCSGA (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 an attractive 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, and a darkroom.

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 are 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 200 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.

The Media Services department does graphics, design, layout, paste-up, printing, collating, and binding of college brochures, forms, programs, posters, and handbooks. Also, the department does black and white photography and the developing of prints. Media Services serves all the departments within the College. Other services include the scheduling and set-up of AV equipment, audio, video and teleconference taping. Normal operating hours are from 8:00 a.m. to 5:00 p.m. Monday through 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

EXPENSES

(SUBJECT TO CHANGE)

Tuition and Fees Per Quarter

Full-Time Student Tuition $105.00
Non-Resident Full-Time Student Tuition 981.00
Part-Time Student Tuition (per quarter credit hour).....8.75
Non-Resident Part-Time Student Tuition (per quarter credit hour) 81.75
Occupational Extension Student (per class) 25.00
Avocational Extension Student (per class) 25.00
Practical Skills Extension Student (per class).....25.00
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
Accident Insurance (per year - optional).....8.50
Malpractice Insurance (Required for the following curriculums only).....15.00
Drug and Alcohol Technology
Emergency Medical Services (continuing education)
Cosmetology
Electroneurodiagnostics Technology
Nursing Education Options
Medical Laboratory Technology
Nursing Assistant
Physical Therapist Assistant
Radiologic Technology
Respiratory Care Technology
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 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 Executive Dean for College and 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.

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

FINANCIAL AID

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

Office of Student Financial Aid
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, Extension 224.

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. (SEOG).
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 names of any students who claim to have registered but have not will be referred to the U.S. Department of Justice.

Satisfactory Progress

For the purposes of continuing financial aid, a curriculum student is making satisfactory progress if the cumulative quality point ratio meets the standards of the College Academic Probation/Suspension Schedule and the student is successfully completing 70% of the courses attempted each term. A student performing below this minimum satisfactory level will automatically be placed on financial assistance probation for the following quarter. If at the end of the probationary quarter, the cumulative QPR is still below the minimum satisfactory level or less than 70% of the courses attempted have been successfully completed, all financial aid will be terminated. Financial aid will be reinstated once the necessary QPR is achieved and a minimum of 70% of the courses attempted are successfully completed per term. Students may not pursue a particular degree for more than 10 (ten) quarters and continue to receive financial assistance. The maximum time frame for multiple degrees is 5 (five) years.

Policy for Packaging Financial Aid

A Pell Grant is usually combined with College Work-Study Program. (CWSP). Composition of the package is dependent upon the program enrolled, 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 school are responsible for repaying any overpayment which may result. Overpayment letters will be written to students telling 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 colleges, regardless of whether or not aid was received.

Financial Aid Programs

Pell Grants

Pell Grants are awards 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 paid back.

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 awards. Students with a bachelor's degree, special studies and students attending less than half-time are ineligible to receive a Pell Grant.

N.C. Student Incentive Grant Program

Legal residents of North Carolina accepted for enrollment full-time, and in good standing, may apply for Student Incentive Grants to help pay their education 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 $100 to $800 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 $3.80 per hour. Students approved for this program can expect to complete, in addition to the award letter, all necessary employment documentation.

Job Training Partnership Act (JTPA)

This act provides federal money for tuition, books, and transportation to income eligible persons who are enrolled in an approved curriculum. This program is administered through the local Employment Security Commission Office.

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 in a full-time undergraduate program 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.

Applications for the program are available from the Financial Aid Office or upon request by writing:

College Foundation, Inc.
Post Office Box 12100
Raleigh, N.C. 27605-2100

The James G. K. McClure Educational and Development Fund

The objective of the College Scholarship Program of the James G. K. McClure Educational and Development Fund is to aid students who can demonstrate academic promise and financial need. These students must reside in western North Carolina. Rural residents will be given preference in the selections. Most commonly, scholarships will be awarded to high school graduates matriculating at colleges for the first time, but in exceptional cases (usually financial distress) a scholarship will be awarded to a student who has been attending college. Health career and community college scholarships are open to all students. The McClure Fund also offers a special scholarship for minority students from western North Carolina and a program for students from Canada

Township in Jackson County. Applications can be obtained from the Financial Aid Office.

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.

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.

William B. Dillard Memorial Scholarship

Mr. Dillard was instrumental in the establishment of Southwestern Community College and its success. This scholarship was established by family and friends to be awarded to eligible students of western North Carolina.

Harold's Supermarket Scholarship

This program provides a scholarship each year for employees of Harold Potts 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.

Jarrett House Invitational Scholarship

The Jarrett House Invitational Scholarship is established to fund the education of eligible Jackson County residents. The $500 per year renewable scholarship is supported from the annual proceeds of the Jarrett House Invitational Golf Scholarship Tournament.

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 compliment the present aid program operated by the College. Applications may be obtained from the Financial Aid Office.

Southwestern Community College Alumni Association Scholarship

This scholarship is given annually from the Southwestern Community College Alumni Association Endowment.

Priority is given to applicants from the service area whose parent or spouse is an alumnus of the College.

Applications are available through the College 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 in their family 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.

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 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 stop by the V.A. office at least one month before entering college.

V.A. benefits recipients must complete the following steps in order to enroll on 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 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 school. Failure to do so will create overpayments for which the veteran will probably be liable.





CONTINUING EDUCATION
DIVISION

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 purpose 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 an 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 sometimes awarded upon successful completion of a course or series of courses. 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 or participation in an organized Continuing Education class.

Cost

The registration fee for occupational, academic, practical skills, and avocational courses is $25.00. All Adult Basic Education, Human Resources Development, and GED courses are free. Adults, 65 or older, who are residents of North Carolina may take courses free of charge.

Enrollment

Call the Continuing Education Office, 586-4091 (Jackson), 369-7331 or 369-2428 (Macon), 497-7233 (Cherokee), 488-6413 (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 high school education. Classes are flexible; they are designed 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 identification, reading 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 Education 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, Macon and Swain counties.

Adult High School/General Education Development/High School Preparation

A review or refresher course is available 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 specially designed program of study is available for mentally retarded adults.

Academic Extension

Academic Extension courses are available in art, religion, languages, math, anthropology, economics, philosophy, sociology, psychology, geography, history, journalism, politics, and science.

Occupational Extension

The Occupational Extension program 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, metalworking, plastics, seafood occupations, textiles, human resources development and training for employment upgrading or retraining for specific jobs.

Practical Skills

Courses are available in mechanics and maintenance, homemaking, and miscellaneous skills.

Avocational Courses

Courses are offered for leisure, self-improvement, and recreation.

Fire Service Training

A variety of courses are offered in cooperation with individual fire departments in the service area. Specific courses 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

The Fire and Rescue Training Facility is located adjacent to the SCC Macon Center. This 4,100 square foot, three-story live burn building is designated for a variety of training exercises. Both fire and smoke exercises can be conducted in and on the structure, and rescue operations can be simulated throughout the building. SCC will coordinate training for firefighters and rescue personnel in the region and will be responsible for the scheduling of this facility.

SCC offers a variety of emergency medical courses for both the lay public and those persons who are seeking additional professional certifications. These courses are recognized by the American Red Cross, the American Heart Association and the North Carolina Office of Emergency Medical Services.

The courses offered are as follows:
American Red Cross Standard First Aid
American Red Cross Advanced First Aid
Cardiopulmonary Resuscitation
First Responder
Emergency Medical Technician
Emergency Medical Technician - Intermediate
Emergency Medical Technician - Advanced
Basic Trauma Life Support

Law Enforcement Training

Various specialized law enforcement courses are conducted in the area served by Southwestern Community College, such as:

Breathalyzer 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

Hospitality

Southwestern Community College offers Hospitality Training as one answer to western 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
Hotel-Motel Management
Human Relations
Menu Planning
Modified Diets
School Food Service
Quantity Food Production
Use and Care of Equipment
Waiter-Waitress

New and Expanding Industry Training

Southwestern Community College representatives, along with an 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 individual students' career goals.

Topics covered in class include career choice, self-image, communication skills, human relations on the job, decision making, goal-setting, stress management, and job search skills. Instruction in academic topics includes 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 per week for five weeks. There is no registration fee and no charge for books. Anyone who is not currently working full-time may apply.

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 College serves.

Through special funding grants, a professional in the visual, literary 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 programs for public schools, civic clubs, art councils, church and community organizations, as well as radio/television appearances.

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

The artist performs at no charge to the public.

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

Small Business Center

The Small Business Center is a specially funded program which provides no-fee consulting and seminars for small business owners and prospective small business owners.

The Small Business Center provides assistance in developing business plans to obtain financing. Assistance is also given toward marketing, accounting, personnel, financing, and management concerns relating to small business.

The Small Business Center provides seminars of interest to specific trade associations and to the business community at large. There is either no cost to attend the seminars or a nominal fee which reverts to a co-sponsoring organization. All requests for business seminars are considered.

To request consulting services or seminars contact the Small Business Center at (704) 497-7233, or your nearest SCC office.

Telecommunications

Via satellite technology and through various Telecommunication Network Systems, 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.

Through special arrangements many 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 three ways to complete his or her preparation: The Adult Basic Education program, High School Equivalency classes, or Developmental Studies. 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 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. G.E.D. testing sites have been established in Franklin, Bryson City, and Cherokee, as well as on the SCC Sylva campus.

Jackson County Continuing Education

The office for Jackson County Continuing Education is located in the Vocational Building on SCC's Sylva 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 Macon County Industrial Park in Franklin, N.C. This office coordinates the continuing education and curriculum classes that are offered for Macon County. For more information about offerings, call (704) 369-7331 or (704) 369-2428.

Cherokee Center Offices

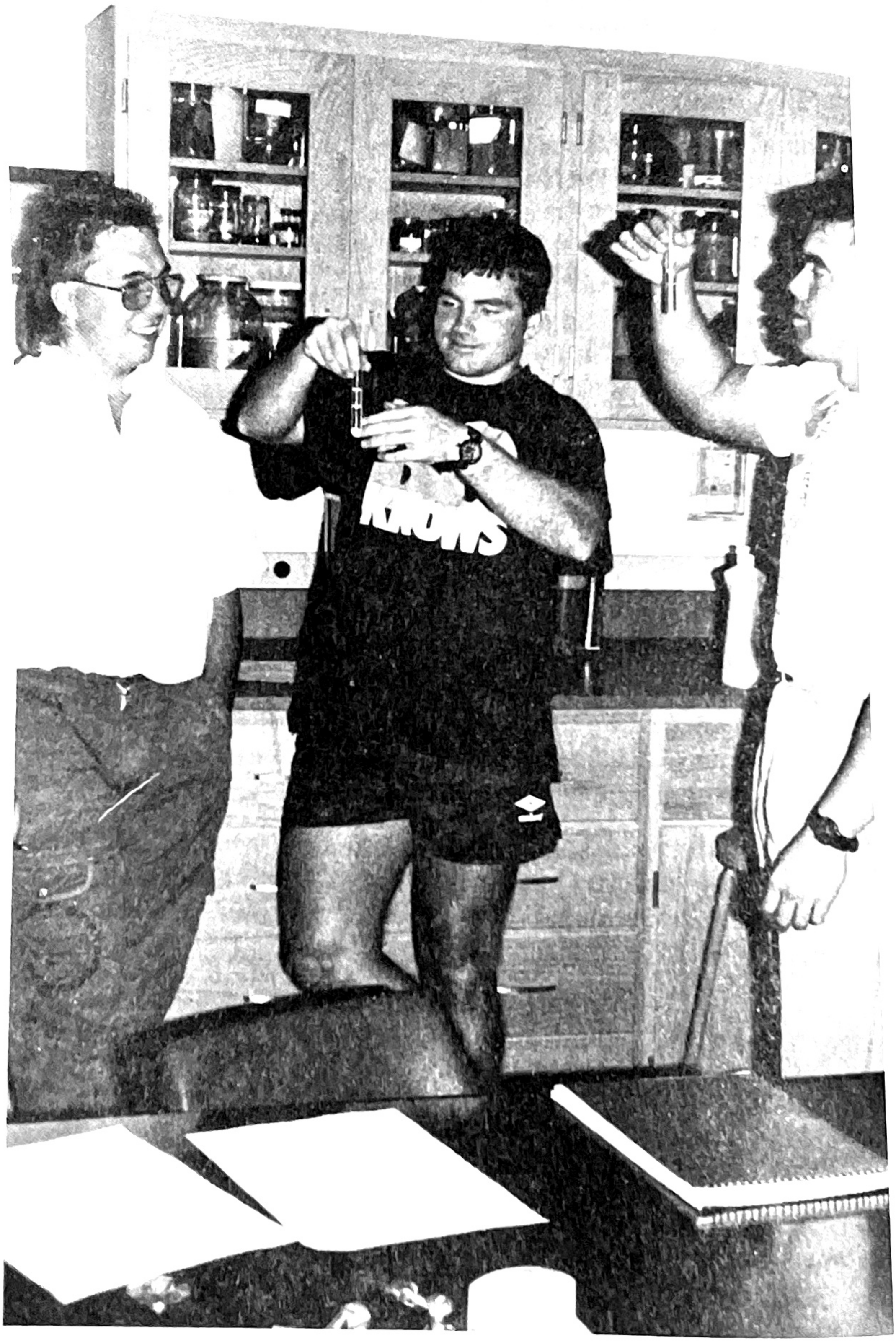
Offices are located in Cherokee on the Qualla Boundary, Acquoni Road in the Cherokee Boys Club Complex. This office coordinates the continuing education and curriculum classes that are offered for Cherokee and Swain County. In addition, it houses SCC's Small Business Center. For more information about offerings, call (704) 497-7233.

Swain Center

The Swain County Center is located in downtown Bryson City at the corner of main and Everett Streets. This office coordinates SCC's Small Business Center. For more information, call (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 nearest continuing education office in Sylva 586-4091, in Cherokee 497-7233, in Swain County 488-6413, or in Macon County 369-7331.



COLLEGE CURRICULUM
PROGRAMS OF STUDY

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, management and data processing operations.

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

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

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
EDP	102	Computer Literacy for Beginners	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	2	5
BUS	248	Business Economics I	5	0	5
BUS	110	Office Machines	1	2	2
			15	4	17
THIRD QUARTER					
ENG	204	Oral Communications	3	0	3
BUS	121	Accounting II	4	2	5
BUS	237	Small Business Management	5	0	5
BUS	102	Typing I	1	4	3
			13	6	16

FOURTH QUARTER

BUS	221	Payroll Recordkeeping	2	2	3
BUS	122	Accounting III	4	2	5
BUS	133	Governmental Accounting	3	2	4
BUS	141	Current Trends – Financial	3	0	3
***	***	Elective (Social Science)	3	0	3
			15	6	18

FIFTH QUARTER

BUS	115	Business Law	5	0	5
BUS	222	Intermediate Accounting I	3	2	4
BUS	225	Cost Accounting	3	2	4
ENG	103	Report Writing	3	0	3
			14	4	16

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	5	0	5
BUS	131	Business Communications	3	2	4
			17	6	20

SEVENTH QUARTER

BUS	226	Introduction to Auditing	3	0	3
BUS	231	Income Taxes II	3	2	4
EDP	205	Computerized Accounting	1	4	3
BUS	259	Managerial Planning	3	0	3
			10	6	13

AWARD: Associate of Applied Science Degree

ADMINISTRATIVE OFFICE TECHNOLOGY
T-030

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

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

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

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	1	4	3
ORI 101	College Orientation	1	0	1
BUS 106	Shorthand I	3	2	4
OR				
BUS 239	Marketing	5	0	5
		20/22	6/4	23/24
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
BUS 103	Typing II	1	4	3
BUS 107	Shorthand II	3	2	4
OR				
EDP 102	Computer Literacy for Beginners	1	2	2
BUS 120	Accounting I	4	2	5
BUS 110	Office Machines	1	2	2
		14/12	10	19/17

THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 104	Typing III	1	4	3
BUS 237	Small Business Management	5	0	5
BUS 108	Shorthand III	3	2	4
OR				
BUS 232	Sales Development	3	2	4
BUS 121	Accounting II	4	2	5
		16	8	20
FOURTH QUARTER				
COE 102	Cooperative Work Experience	0	20	2
FIFTH QUARTER				
ENG 103	Report Writing	3	0	3
BUS 205	Advanced Typing	1	4	3
BUS 202	Word Processing Systems I	1	4	3
BUS 206	Dictation and Transcription I	3	2	4
OR				
BUS 115	Business Law	5	0	5
PSY 109	Human Relations	3	0	3
		11/13	10/8	16/17
SIXTH QUARTER				
BUS 229	Income Taxes I	3	2	4
BUS 203	Word Processing Systems II	1	4	3
BUS 207	Dictation and Transcription II	3	2	4
OR				
BUS 221	Payroll Recordkeeping	2	2	3
BUS 248	Business Economics I	5	0	5
BUS 131	Business Communications	3	2	4
		15/14	10	20/19
SEVENTH QUARTER				
BUS 214	Secretarial Procedures	3	2	4
EDP 107	Data Management in Small Business	3	2	4
BUS 208	Dictation and Transcription III	3	2	4
OR				
EDP 205	Computerized Accounting	1	4	3
BUS 209	Machine Transcription	2	0	2
BUS 234	Current Trends in Office Administration	2	0	2
		13/11	6/8	16/15

AWARD: *Associate of Applied Science Degree*

AIR CONDITIONING, HEATING, AND REFRIGERATION
(V-024)

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

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

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
AHR	1104	Fundamentals of Forced Air Heating Systems	2	0	6	4
AHR	1105	Fundamentals of Hydronic Heating Systems	2	0	6	4
MAT	1101	Fundamentals of Math	5	0	0	5
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
			12	0	18	18
SECOND QUARTER						
AHR	1121	Principles of Refrigeration	3	0	6	5
AHR	1120	Air Conditioning Systems	3	0	6	5
PHY	1101	Applied Science I	3	2	0	4
DFT	1122	Blueprint Reading and Sketching: Mechanical	1	0	3	2
WLD	1101	Basic Welding	1	0	3	2
			11	2	18	18

THIRD QUARTER

AHR 1118	Distribution Systems: Fabrication and Installation	2	0	6	4
AHR 1119	Heating and Air Conditioning Servicing	4	0	9	7
ENG 1106	Fundamentals of English	3	0	0	3
BUS 237	Small Business Management	5	0	0	5
		14	0	15	19

FOURTH QUARTER

AHR 1126	All Year Comfort Systems I: Conventional	4	0	9	7
AHR 1127	All Year Comfort Systems II: Heat Pumps	4	0	9	7
PSY 109	Human Relations	3	0	0	3
		11	0	18	17

AWARD: Diploma

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 the politics and 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		HOURS			
		Class	**Lab**	**Shop**	**Credit**
MAJOR COURSES;					
EGY 101	Introduction to Alternate Energy Systems	2	0	0	2
EGY 102	Solar Radiation	2	0	0	2
EGY 103	Principles of Solar Collectors	3	0	6	5
EGY 104	Solar Hot Water Systems	4	0	6	6
EGY 105	Space Heat Demand	2	0	0	2
AHR 101	Non-Solar Heating Systems	5	4	0	7
EGY 106	Passive Design	5	0	0	5
EGY 107	Solar Space Conditioning	4	0	6	6
EGY 210	Energy Project Lab I	2	4	0	4
EGY 108	Experimental Design	1	2	0	2
EGY 205	Photovoltaic Systems	3	2	0	4
AHR 201	Instrumentation and Controls	3	0	6	5
ECO 201	Cost Benefit Analysis of Alternate Energy Systems	2	0	0	2
EGY 203	Design of Alternate Energy Systems	2	2	0	3
EGY 208	Wind and Hydro Systems	2	0	0	2
EGY 201	Installation and Maintenance of Solar Energy Systems	3	0	6	5
EGY 206	Energy Management and Planning	2	0	0	2
EGY 211	Energy Project Lab II	2	0	6	4
EGY 209	Advanced Control Systems	2	2	0	3
		51	16	36	71

RELATED COURSES

MAT	105	Introduction to Algebra	5	0	0	5
MAT	111	Applied Trigonometry	5	0	0	5
POL	104	Political Perspectives on Energy Use	2	0	0	2
PHY	101	Physics: Mechanics	3	2	0	4
ELC	109	Fundamentals of AC and DC	3	2	0	4
DFT	101	Technical Drafting I	0	0	6	2
PHY	102	Physics: Heat, Sound and Light	3	2	0	4
DFT	102	Technical Drafting II	0	0	6	2
ORI	101	College Orientation	1	0	0	1
BUS	237	Small Business Management	5	0	0	5
			27	6	12	34

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
		Elective in Social Science	3	0	0	3
			9	0	0	19

WORK EXPERIENCE: 0

TOTAL CREDITS: 124

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.

CURRICULUM BY QUARTERS

	HOURS			
	Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER				
AUT 1116 Automotive Engines	8	0	15	13
OR				
AUT 1116A Automotive Engines: Theory and Construction	*3*	*0*	*3*	*4*
AUT 1116B Engine Diagnosis and Service-Block Assembly	*3*	*0*	*6*	*5*
AUT 1116C Engine Diagnosis and Service-Head Assembly and Valve Gear	*2*	*0*	*6*	*4*
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 1128A Fuel Systems and Carburetor Fundamentals	*2*	*0*	*6*	*4*
AUT 1128B Electronic Feedback Carburetion Systems	*1*	*0*	*3*	*2*
AUT 1128C Electronic Fuel Injection – Throttle Body Type	*1*	*0*	*3*	*2*
AUT 1128D Electronic Fuel Injection – Port Type	*1*	*0*	*3*	*2*
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 1129A	*Fundamentals of Electricity*	*3*	*0*	*6*	*5*
AUT 1129B	*Automotive Electrical Systems*	*1*	*0*	*3*	*2*
AUT 1129C	*Computerized Engine Controls*	*2*	*0*	*3*	*3*
AUT 1129D	*Computerized Accessory Systems*	*1*	*0*	*3*	*2*
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	Automotive Diagnosis and Tune-Up	5	0	9	8
OR					
AUT 1126A	*Automotive Diagnosis*	*3*	*0*	*6*	*5*
AUT 1126B	*Automotive Engine Tune-Up*	*2*	*0*	*3*	*3*
AHR 1101	Air Conditioning Systems (Automotive)	2	0	6	4
		9	0	18	15
FIFTH QUARTER					
AUT 1123	Chassis and Suspension Systems	5	0	9	8
OR					
AUT 1123A	*Suspension and Steering Fundamentals and Service*	*2*	*0*	*3*	*3*
AUT 1123B	*Wheel Assembly Service and Balance*	*1*	*0*	*3*	*2*
AUT 1123C	*Wheel Alignment*	*2*	*0*	*3*	*3*
AUT 1121	Braking Systems	3	0	6	5
OR					
AUT 1121A	*Braking Systems – Fundamentals and Service*	*2*	*0*	*3*	*3*
AUT 1121B	*Antilock Braking Systems*	*1*	*0*	*3*	*2*
		8	0	15	13
SIXTH QUARTER					
AUT 1124	Manual Transmissions and Power Trains	5	0	18	11
OR					
AUT 1124A	*Manual Transmissions and Drivelines – Construction and Theory of Operation*	*2*	*0*	*3*	*3*
AUT 1124B	*Automobile Clutches – Operation and Service*	*1*	*0*	*6*	*3*
AUT 1124C	*Driving Axles and Driveline Service*	*1*	*0*	*3*	*2*
AUT 1124D	*Manual Transmissions and Transaxle Service*	*1*	*0*	*6*	*3*
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	8	0	18	14
OR				
AUT 1127A Automatic Transmissions and Transaxles – Construction and Operation	*3*	*0*	*6*	*5*
AUT 1127B Automatic Transmissions Service – Rear Wheel Drive	*3*	*0*	*6*	*5*
AUT 1127C Automatic Transaxle Service	*2*	*0*	*6*	*4*
BUS 237 Small Business Management	5	0	0	5
	13	0	18	19

AWARD: *Advanced Diploma*



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 education 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.

			HOURS		
			Class	**Lab**	**Credit**
MAJOR COURSES:					
BUS	101	Introduction to Business	5	0	5
BUS	110	Office Machines	1	2	2
BUS	120	Accounting I	4	2	5
BUS	121	Accounting II	4	2	5
BUS	125	Principles of Bank Operations	3	0	3
BUS	142	Installment Credit	3	0	3
BUS	143	Savings and Time Deposit	3	0	3
BUS	144	Financial Principles	3	0	3
BUS	230	Analyzing Financial Statements	3	0	3
BUS	256	Introduction to Commercial Lending	3	0	3
BUS	259	Managerial Planning	3	0	3
BUS	280	Federal Reserve System	3	0	3
BUS	281	Bank Investments	3	0	3
BUS	284	Bank Management	3	0	3
BUS	286	Bank Cards	3	0	3
BUS	287	Financing Business Enterprise	3	0	3
BUS	288	Home Mortgage Lending	3	0	3
***	***	Technical Elective	3	0	3
			56	6	59

RELATED COURSES:				
BUS 115	Business Law	5	0	5
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
BUS 272	Principles of Supervision	5	0	5
EDP 104	Introduction to Data Processing	3	2	4
MAT 110	Business Math	5	0	5
ORI 101	College Orientation	1	0	1
		37	4	39
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
SOC 102	Principles of Sociology	5	0	5
		24	0	24
TECHNICAL ELECTIVES:				
BUS 277	Credit and Collection	3	2	4
BUS 278	Money and Banking	3	2	4
BUS 283	International Banking	3	0	3
BUS 293	Credit Administration	3	0	3
BUS 294	Branch Management	3	0	3

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

	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
AWARD:			*Certificate*

BUSINESS ADMINISTRATION
T-018

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

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

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

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	1	4	3
ORI 101	College Orientation	1	0	1
		17	4	19
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
BUS 110	Office Machines	1	2	2
BUS 120	Accounting I	4	2	5
BUS 248	Business Economics I	5	0	5
		15	4	17
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
BUS 121	Accounting II	4	2	5
BUS 237	Small Business Management	5	0	5
EDP 102	Computer Literacy for Beginners	1	2	2
		13	4	15

FOURTH QUARTER

BUS	272	Principles of Supervision	5	0	5
BUS	122	Accounting III	4	2	5
BUS	221	Payroll Recordkeeping	2	2	3
***	***	Related Elective	3	0	3
			14	4	16

FIFTH QUARTER

ENG	103	Report Writing	3	0	3
BUS	115	Business Law	5	0	5
BUS	239	Marketing	5	0	5
***	***	Technical Elective	3	0	3
			16	0	16

SIXTH QUARTER

PSY	109	Human Relations	3	0	3
BUS	127	Financial Management	5	0	5
BUS	229	Income Taxes I	3	2	4
BUS	244	Retail Management	5	0	5
BUS	131	Business Communications	3	2	4
			19	4	21

SEVENTH QUARTER

BUS	233	Current Trends in Business Management	3	2	4
BUS	231	Income Taxes II	3	2	4
BUS	232	Sales Development	3	2	4
BUS	259	Managerial Planning	3	0	3
			12	6	15

TECHNICAL ELECTIVES

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
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

RELATED ELECTIVES RECOMMENDED

COE	101	Cooperative Work Experience	0	10	1
COE	102	Cooperative Work Experience	0	20	2
EDP	212	Trends and Issues in Data Processing	3	0	3

AWARD: Associate of Applied Science Degree

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.

CURRICULUM BY QUARTERS

			HOURS		
			Class	**Lab**	**Credit**
FIRST QUARTER					
EDP	104	Introduction to Data Processing	3	2	4
EDP	108	Introduction to Programming	3	4	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
			17	6	20
SECOND QUARTER					
BUS	120	Accounting I	4	2	5
EDP	211	PASCAL	3	4	5
ENG	102	Language and Composition II	5	0	5
MAT	119	Mathematics of Computer Systems	3	0	3
			15	6	18
THIRD QUARTER					
BUS	121	Accounting II	4	2	5
EDP	214	COBOL Programming	3	4	5
EDP	219	System Analysis and Design	5	0	5
ENG	204	Oral Communications	3	0	3
			15	6	18

FOURTH QUARTER

BUS	202	Word Processing Systems I	1	4	3
EDP	107	Data Management in Small Business	3	2	4
EDP	204	Computer Graphics Design	2	4	4
ENG	103	Report Writing	3	0	3
***	***	Technical Elective	3	0	3
			12	10	17

FIFTH QUARTER

EDP	206	Operating Systems	3	2	4
EDP	208	RPG II	2	4	4
EDP	201	Individual Programming Project: PASCAL II	3	2	4
	OR				
EDP	207	Individual Programming Project: Novelle	3	2	4
	OR				
EDP	209	Individual Programming Project: C Language Programming	3	2	4
***	***	General Education Elective	3	0	3
			11	8	15

SIXTH QUARTER

EDP	216	Integrated Applications Development I	2	4	4
EDP	218	Database Programming	3	0	3
EDP	220	Structured Testing and Documentation	2	4	4
MAT	108	College Algebra	5	0	5
			12	8	16

SEVENTH QUARTER

EDP	202	Assembly Language and Programming	3	4	5
EDP	221	Integrated Applications Development II	1	4	3
EDP	212	Trends and Issues in Data Processing	3	0	3
***	***	Related Elective	3	0	3
			10	8	14

TECHNICAL ELECTIVES

COE	102	Cooperative Work Experience	0	20	2
EDP	105	Special Topics in Computer Operations	1	2	2
EDP	110	BASIC Programming II	2	4	4
EDP	112	Microcomputer Word Processing	1	2	2
EDP	114	Special Topics in Data Processing	3	2	4
EDP	200	Operations Lab	0	4	2
EDP	210	FORTRAN Programming	2	4	4
EDP	205	Computerized Accounting	1	4	3

RELATED ELECTIVES

BUS	237	Small Business Management	5	0	5
BUS	259	Managerial Planning	3	0	3
PSY	109	Human Relations	3	0	3

AWARD: Associate of Applied Science Degree

CARPENTRY
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 informtion 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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
CAR	1101	Principles of Carpentry	5	0	15	10
or						
CAR	*1101A*	*Form Construction*	*1*	*0*	*3*	*2*
CAR	*1101B*	*Methods of Construction*	*2*	*0*	*6*	*4*
CAR	*1101C*	*Site Preparation and Layout*	*2*	*0*	*6*	*4*
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
DFT	1110	Blueprint Reading: Building Trades	1	0	3	2
			10	0	21	17
SECOND QUARTER						
CAR	1103	Carpentry: Framing	5	0	15	10
or						
CAR	*1103A*	*Floor Systems*	*1*	*0*	*3*	*2*
CAR	*1103B*	*Wall and Ceiling Framing*	*2*	*0*	*6*	*4*
CAR	*1103C*	*Roof Framing*	*2*	*0*	*6*	*4*
DFT	1131	Drafting: Building Trades	1	0	3	2
ENG	1111	Reading Comprehension	2	0	0	2
BUS	237	Small Business Management	5	0	0	5
			13	0	18	19

THIRD QUARTER

CAR	1104	Carpentry: Finishing	5	0	15	10
	or					
	CAR	*1104A Stairways*	*1*	*0*	*3*	*2*
	CAR	*1104B Exterior Finishing*	*2*	*0*	*6*	*4*
	CAR	*1104C Interior Finishing*	*2*	*0*	*6*	*4*
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
	or					
	CAR	*1106A Millwork*	*1*	*0*	*3*	*2*
	CAR	*1106B Base and Wall Cabinets*	*2*	*0*	*6*	*4*
	CAR	*1106C Vanities, Built-Ins and Arches*	*2*	*0*	*6*	*4*
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

AWARD: *Diploma*

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.

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
ENG 101	Language and Composition I	5	0	0	5
ART 100	Art Orientation	1	0	0	1
DFT 101	Technical Drafting I	0	0	6	2
CAT 102	Art and Design	1	0	6	3
CAT 121	Commercial Art Fundamentals	3	0	6	5
ORI 101	College Orientation	1	0	0	1
		11	0	18	17
SECOND QUARTER					
ENG 102	Language and Composition II	5	0	0	5
DFT 102	Technical Drafting II	0	0	6	2
CAT 101	Advertising Principles	3	0	0	3
CAT 105	Basic Drawing	1	4	0	3
CAT 122	Typographic Design	3	0	6	5
		12	4	12	18
THIRD QUARTER					
ENG 204	Oral Communications	3	0	0	3
CAT 106	Life Study	0	6	0	3
CAT 116	Photography I	2	6	0	5
CAT 123	Layout and Design	4	0	6	6
EDP 115	Computer Graphics	3	2	0	4
		12	14	6	21

FOURTH QUARTER

CAT 236	Advertising Concepts and Campaigns	3	2	0	4
CAT 117	Photography II	2	0	3	3
MAT 135	Copyfitting Math	3	0	0	3
CAT 201	Art History	3	0	0	3
CAT 212	Industrial Art and Design	1	6	0	4
		12	8	3	17

FIFTH QUARTER

BUS 232	Sales Development	3	2	0	4
CAT 110	General Illustration	2	0	6	4
CAT 224	Art Production	3	6	0	6
CAT 206	Project Seminar I	2	0	3	3
		10	8	9	17

SIXTH QUARTER

BUS 113	Keyboarding	1	2	0	2
CAT 225	Commercial Art and Advertising Design	4	0	6	6
CAT 217	Silk Screen Techniques	2	6	0	5
CAT 231	Project Seminar II	2	0	3	3
		9	8	9	16

SEVENTH QUARTER

PSY 103	General Psychology	5	0	0	5
CAT 226	Commercial Art and Advertising Design (Adv)	4	0	6	6
CAT 232	Project Seminar III	1	0	6	3
CAT 234	Portfolio and Resume Development	4	0	0	4
		14	0	12	18

AWARD: Associate of Applied Science Degree

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 transfer, 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 signals between the 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 master a highly structured language 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.

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
RELATED ELECTIVES					
EDP 106	BASIC Programming	2	2	0	3
EDP 210	FORTRAN Progrmming	2	4	0	4
EDP 214	COBOL Programming	3	4	0	5

AWARD: Associate of Applied Science Degree

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 makeup 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.

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	5	0	0	5
		10	0	24	18
FOURTH QUARTER					
COS 1004	Scientific Study	5	0	0	5
COS 1044	Clinical Applications	0	0	24	8
BUS 237	Small Business Management	5	0	0	5
		10	0	24	18

FIFTH QUARTER (ADVANCED DIPLOMA)

COS 1055	Clinical Applications	0	0	24	8
COS 1005	Theory Review	5	0	0	5
		5	0	24	13

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

COURSES FOR COSMETOLOGY INSTRUCTOR CERTIFICATION

COS 3004	Cosmetology Instructor Training	7	0	0	7
COS 3005	Cosmetology Instructor Training: Practicum I	0	0	30	10
COS 3022	Cosmetology Instructor Training	7	0	0	7
COS 3023	Cosmetology Instructor Training: Practicum II	0	0	30	10



COSMETOLOGY
Evening Program
V-009

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	5	0	0	5
		5	0	15	10

EIGHTH QUARTER

COS	1518	Clinical Applications	0	0	12	4
***	****	Related Elective	3	0	0	3
			3	0	12	7

RECOMMENDED ELECTIVES:

BUS	237	Small Business Management	5	0	0	5
EDP	102	Computer Literacy for Beginners	1	2	0	2
NUR	110	First Aid	3	0	0	3

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.

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.

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	113	Keyboarding	1	2	0	2
SOC	103	Social Problems I: Drug and Alcohol Addiction	5	0	0	5
ORI	101	College Orientation	1	0	0	1
			17	2	0	18

SECOND QUARTER

CJC	103	Constitutional Law	5	0	0	5
ENG	112	Freshman Composition II	5	0	0	5
MAT	112	College Mathematics	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

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

AWARD: Associate of Applied Science Degree



DEVELOPMENTAL STUDIES

The purpose of the Developmental Studies program is to provide an educational opportunity for students to increase their academic learning skills in preparation for regular curriculum courses. Pre-curriculum courses are designed to provide individualized and group instruction in the areas of reading, standard written English, and mathematics. These courses are required of students (with exception of certain Allied Health curriculum candidates) who did not achieve minimum scores on one or more college placement test areas, recommended to students seeking admission into certain Allied Health curriculums, and recommended to students on probation or suspension. Also, curriculum students who made a sufficient score on the college placement test but who desire to sharpen their skills for regular curriculum composition or math courses may choose to take appropriate level, pre-curriculum course-work. The college placement test results determine the pre-curriculum course areas and levels appropriate for students. Preferably, course-work should be taken prior to, or concurrently with, first-year curriculum studies to avoid extending the total time for graduation.

The Developmental Studies program is open to students on a year-round quarterly basis. Classes are conveniently scheduled, both day and evening, in the Student Success Center on the main campus, at the Macon Center, and at the Cherokee Center.

Upon course completion, students will have learned to:

1. build academic skills in the content areas of reading, standard written English, and/or mathematics.
2. expand vocabulary and higher-level thinking skills.
3. develop responsibility for effective time management, learning styles, and study strategies.
4. enhance personal attributes of self-confidence, positive attitude, motivation, and commitment to learning.

DEVELOPMENTAL SUBJECTS		HOURS		
		Class	**Lab**	**Credit**
READING				
DVS 070	Basic Reading	1	4	3
ENG 010	Reading	1	4	3
ENGLISH				
ENG 080	Developmental English	1	4	3
ENG 011	Basic Grammar	1	4	3

MATHEMATICS

MAT 081	Developmental Math	1	4	3
MAT 084	Vocational Math	0	4	2
MAT 100	Basic Math	5	0	5



DRUG AND ALCOHOL TECHNOLOGY
T-140

The Drug and Alcohol 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 and alcohol abuse to help them regain useful places 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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER (Fall)						
DAT	111	Introduction to Substance Abuse I	3	2	0	4
BIO	121	Anatomy and Physiology I	4	2	0	5
ENG	110	Freshman Composition I	5	0	0	5
PSY	103	General Psychology	5	0	0	5
ORI	101	College Orientation	1	0	0	1
			18	4	0	20
SECOND QUARTER (Winter)						
DAT	112	Introduction to Substance Abuse II	3	2	0	4
PSY	203	Human Growth and Development	5	0	0	5
ENG	112	Freshman Composition II	5	0	0	5
BIO	122	Anatomy and Physiology II	4	2	0	5
			17	4	0	19
THIRD QUARTER (Spring)						
DAT	120	Interviewing and Counseling I	3	2	0	4
DAT	130	Human and Social Services	2	2	0	3
DAT	208	Support Groups	3	2	0	4
ENG	204	Oral Communications	3	0	0	3
			11	6	0	14

FOURTH QUARTER (Fall)

DAT 121	Interviewing and Counseling II	3	2	0	4
DAT 210	Family Therapy of Substance Abuse	3	2	0	4
DAT 205	Children, Adolescents and Substance Abuse	3	0	0	3
MAT 112	College Mathematics	5	0	0	5
		14	4	0	16

FIFTH QUARTER (Winter)

DAT 201	Techniques of Substance Abuse Education	3	2	0	4
DAT 122	Interviewing and Counseling III	3	2	0	4
DAT 207	Adult Children and Co-Dependency	3	2	0	4
DAT 214	Ethics and Law	3	0	0	3
		12	6	0	15

SIXTH QUARTER (Spring)

DAT 206	Recovery and Relapse Prevention	3	2	0	4
DAT 212	Group Therapy	3	2	0	4
DAT 126	Crisis Intervention	3	2	0	4
*** ***	Elective	5	0	0	5
		14	6	0	17

SEVENTH QUARTER (Summer)

DAT 225	Substance Abuse Seminar	2	0	0	2
DAT 230	Substance Abuse Clinical Education	0	0	30	10
		2	0	30	12

AWARD: Associate of Applied Science Degree

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.

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 Mathematics	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					
COE	102	Cooperative Work Experience	0	20	2
EDU	200	Seminar	5	0	5
			5	20	7

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

AWARD: Associate of Applied Science Degree

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.

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	5	0	0	5
		9	0	6	11

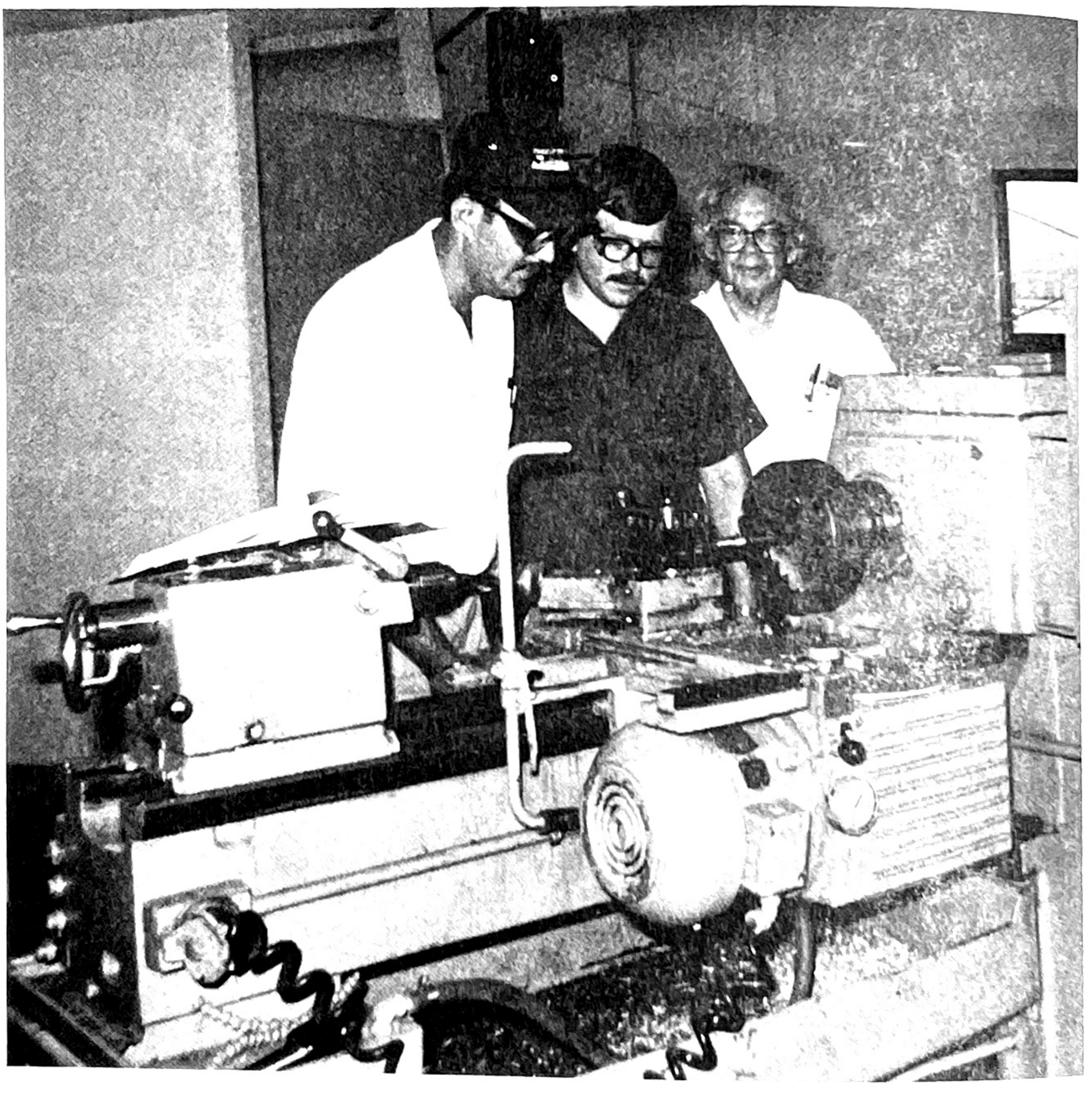
SEVENTH QUARTER

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

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

AWARD: Diploma



ELECTRONEURODIAGNOSTICS TECHNOLOGY T-203

The Electroneurodiagnostic Technology curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients' brain functions through the use of electroencephalographic equipment and other electrophysiological devices.

The student will become skilled in communicating with patients, and other healthcare personnel; taking and abstracting histories; applying recording electrodes; documenting the clinical condition of patients; recognizing electrical activity displayed; managing medical emergencies in the laboratory; and preparing descriptive reports of recorded electrical activity for the physician.

The Electroneurodiagnostic Technologist performs under the supervision of a qualified physician. Graduates of the program may be employed by neurology departments of hospitals and private offices of neurologists and neurosurgeons.

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

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER						
EDT	101	Orientation to Electroneurodiagnostics	1	0	0	1
EDT	113	Neuroscience	3	0	0	3
MLT	110	Medical Terminology	3	0	0	3
ORI	101	College Orientation	1	0	0	1
MAT	112	College Mathematics	5	0	0	5
ELC	109	Fundamentals of AC and DC	3	2	0	4
ENG	101	Language and Composition I	5	0	0	5
			21	2	0	22
SECOND QUARTER						
EDT	102	Management of Medical Emergencies	2	2	0	3
EDT	114	Instrumentation and Recording Methods	4	2	0	5
EDT	115	Clinical Medicine	3	0	0	3
BIO	122	Anatomy and Physiology II	4	2	0	5
ENG	102	Language and Composition II	5	0	0	5
			18	6	0	21

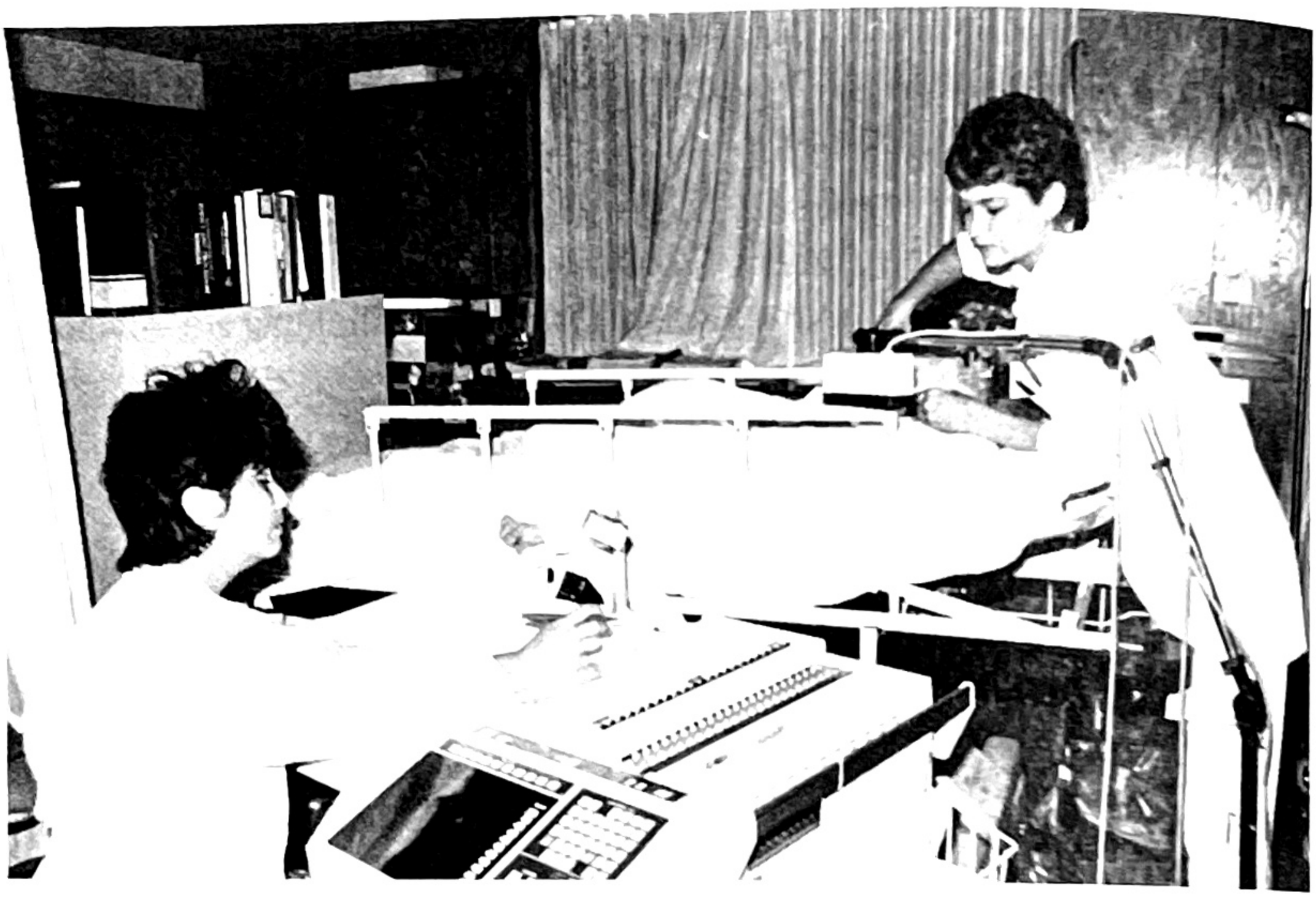
THIRD QUARTER

EDT 107	Laboratory Management	1	0	0	1
EDT 116	Clinical Correlations	3	2	0	4
EDT 117	Special Procedures	2	0	0	2
EDT 118	Laboratory Practice	2	12	0	8
		8	14	0	15

FOURTH QUARTER

EDT 120	Clinical Experience	0	0	27	9

AWARD: Diploma



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 craftsmen.

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.

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

TECHNICAL ELECTIVES

ELN	130	Converter Fundamentals and Design	3	2	0	4
ELN	131	Converter Analysis	3	2	0	4
ELN	132	Test Instruments	1	0	3	2
ELN	133	Communication Circuits	3	2	0	4
ELN	205	Computer Repair	2	4	0	4
ELN	220	Antenna Design	3	2	0	4
ELN	222	Special Project Building I	0	4	0	2
ELN	223	Special Project Building II	0	4	0	2
ELN	234	Electronic Fabrication	0	0	3	1
ELN	238	Microcontroller Design	3	0	3	4
ELN	239	Digital Communications	3	2	0	4
ELN	240	Advanced Microprocessor Design	3	0	3	4
COE	101	Cooperative Work Experience*	0	0	10	1
COE	102	Cooperative Work Experience*	0	0	20	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

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

AWARD: Associate of Applied Science Degree

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:			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	104	Statistics	3	0	3
MAT	105	Introduction to Algebra	5	0	5
MAT	108	College Algebra	5	0	5
PHY	101	Physics: Mechanics	3	2	4
PHY	102	Physics: Heat, Sound, and Light	3	2	4
ORI	101	College Orientation	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:				
BUS 113	Keyboarding	1	2	2
EDP 102	Computer Literacy for Beginners	1	2	2

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

			HOURS			
			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
CAR	1000	Carpentry I	2	0	6	4
ELC	1123	Electrical and Control Systems	1	2	0	2
ELC	1126	Preventive Maintenance for Environmental Systems	5	0	9	8
MAS	1010	Beginning Masonry	2	0	3	3
PLU	1000	Basic Plumbing	2	0	6	4
WLD	1101	Basic Welding	1	0	3	2
***	****	Technical Elective	3	0	0	3
			28	2	57	48
RELATED COURSES:						
DFT	1109	Blueprint Reading: Electrical	2	2	0	3
DFT	1110	Blueprint Reading: Building Trades	1	0	3	2
ISC	1101	Industrial Safety	3	2	0	4
MAT	1112	Mathematics: Building Trades	2	0	0	2
ORI	101	College Orientation	1	0	0	1
			9	4	3	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 ELECTIVES:					
ELC 1127	Electrical Maintenance Procedures	2	0	3	3
AHR 102	Air Conditioning Systems	2	2	0	3
AHR 1102	Installation and Maintenance of Total Comfort Systems	3	0	9	6
AHR 1116	Heating and Cooling Load Calculations	3	0	0	3

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, 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.

CURRICULUM BY QUARTERS

			HOURS		
			Class	**Lab**	**Credit**
FIRST QUARTER					
EDP	102	Computer Literacy for Beginners	1	2	2
ENG	101	Language and Composition I	5	0	5
FAS	101	Introduction to Fashion Merchandising/ Marketing	4	0	4
MAT	110	Business Math	5	0	5
ORI	101	College Orientation	1	0	1
			16	2	17
SECOND QUARTER					
BUS	102	Typing I	1	4	3
CAT	105	Basic Drawing	1	4	3
ENG	102	Language and Composition II	5	0	5
FAS	103	Elements and Coordination of Fashion	4	0	4
FAS	104	Fashion Accessories	4	0	4
			15	8	19
THIRD QUARTER					
BUS	110	Office Machines	1	2	2
BUS	232	Sales Development	3	2	4
ENG	204	Oral Communications	3	0	3
FAS	110	Fabric Science I	4	0	4
FAS	116	Fashion Sketching	2	2	3
FAS	117	Commercial Display Design	3	2	4
			16	8	20

FOURTH QUARTER

COE 101	Cooperative Work Experience	0	10	1
COE 103	Cooperative Work Experience	0	30	3
		0	40	4

FIFTH QUARTER

BUS 239	Marketing	5	0	5
BUS 272	Principles of Supervision	5	0	5
CAT 116	Photography I	2	6	5
FAS 210	Fabric Science II	4	0	4
		16	6	19

SIXTH QUARTER

BUS 244	Retail Management	5	0	5
FAS 212	Professional Wardrobe Analysis	1	0	1
FAS 216	Fashion Sales Promotion I	4	0	4
PSY 103	General Psychology	5	0	5
PSY 109	Human Relations	3	0	3
		18	0	18

SEVENTH QUARTER

FAS 217	Fashion Sales Promotion II	4	0	4
FAS 218	Computer Applications/Merchandising	3	2	4
FAS 219	Current Trends/Marketing	4	0	4
FAS 222	History and Psychology of Dress	3	0	3
FAS 224	Fashion Buying and Merchandising	3	0	3
		17	2	18

AWARD: Associate of Applied Science Degree

FOOD SERVICE MANAGEMENT
T-074

FOOD SERVICE SPECIALIST
V-053*

The Foodservice Management curriculum trains students at the supervisory or "middle management" level in food service with particular emphasis on institutional food service. 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, colleges and university foodservice, school foodservice, industrial cafeterias, private clubs, airline foodservices, food processing manufacturers, foodservice contract companies and commercial restaurants.

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER					
ENG 101	Language and Composition I	5	0	0	5
FSO 101	Orientation to Food Service	3	0	0	3
FSO 102	Introduction to Food Preparation	2	8	0	6
FSO 104	Sanitation and Safety	2	2	0	3
ORI 101	College Orientation	1	0	0	1
MAT 110	Business Math	5	0	0	5
		18	10	0	23

SECOND QUARTER

ENG	102	Language and Composition II	5	0	0	5
FSO	112	Food Preparation II	2	8	0	6
FSO	107	Baking I	2	0	6	4
FSO	114	Menu Planning and Nutrition	5	0	0	5
FSO	141	Hospitality Management	3	0	0	3
			17	8	6	23

THIRD QUARTER

FSO	106	Dining Room Procedures	1	0	3	2
FSO	109	Production Management	3	0	0	3
FSO	204	Food Purchasing and Cost Control	5	0	0	5
FSO	122	Food Preparation III	2	8	0	6
FSO	117	Baking II	2	0	6	4
			13	8	9	20

FOURTH QUARTER

COE	102	Cooperative Work Experience	0	0	20	2
***	***	Technical Elective	2	0	0	2
			2	0	20	4

FIFTH QUARTER

FSO	202	Food Preparation IV	2	8	0	6
BUS	110	Office Machines	1	2	0	2
PSY	103	General Psychology	5	0	0	5
ENG	204	Oral Communications	3	0	0	3
			11	10	0	16

SIXTH QUARTER

BUS	120	Accounting I	4	2	0	5
EDP	100	Selected Topics in Data Processing	0	2	0	1
FSO	212	Food Preparation V	3	6	0	6
PSY	109	Human Relations	3	0	0	3
			10	10	0	15

SEVENTH QUARTER

BUS	237	Small Business Management	5	0	0	5
FSO	207	Food Merchandising	4	2	0	5
FSO	214	Specialty Cooking	2	0	3	3
***	***	Elective	3	0	0	3
			14	2	3	16

TECHNICAL ELECTIVES

FSO	103	Equipment Use and Care	3	0	0	3
FSO	105	Introduction to Garde Manger	1	0	3	2

RECOMMENDED ELECTIVES

COE 101	Cooperative Education	0	0	10	1
COE 103	Cooperative Education	0	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.

Food Service Management
AWARD: Associate of Applied Science

Food Service Specialist
AWARD: *Diploma upon completion of the first four quarters



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 and expand their knowledge of our culture in its many facets.

			HOURS		
			Class	**Lab**	**Credit**
MAJOR COURSES:					
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
GEO	102	Cultural Geography	5	0	5
HIS	101	World Civilization I	5	0	5
HIS	102	World Civilization II	5	0	5
HIS	103	World Civilization III	5	0	5
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
			78	0	78

RELATED COURSES:

ART	101	Art Appreciation	5	0	5
BIO	100	Introduction to Biology	5	0	5
BIO	101	General Biology	3	4	5
BIO	201	Botany	4	2	5
EDP	104	Introduction to Data Processing	3	2	4
EDU	102	Study Skills	2	0	2
ENG	222	Theatre Activities I	0	6	2
ENG	223	Theatre Activities II	0	6	2
ENG	224	Theatre Activities III	0	6	2
FRE	101	Beginning French	5	0	5
FRE	110	Elementary French I	5	0	5
FRE	120	Elementary French II	5	0	5
HIS	104	Cherokee History I	5	0	5
HIS	105	Cherokee History II	5	0	5
MAT	103	Foundation Skills for Algebra	5	0	5
MAT	108	College Algebra	5	0	5
MAT	113	Geometry	5	0	5
MUS	101	Music Appreciation	5	0	5
MUS	108	Chorus	0	3	1
MUS	109	Music Today	3	0	3
ORI	101	College Orientation	1	0	1
PHI	101	Introduction to Philosophy	5	0	5
SPN	101	Beginning Spanish	5	0	5
SPN	102	Elementary Spanish I	5	0	5
SPN	103	Elementary Spanish II	5	0	5
			91	32	103

TOTAL CREDITS: *96 hours required*

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. Students 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.

The student may take 18-22 QHC from the following courses:

		HOURS		
		Class	**Lab**	**Credit**
MAJOR COURSES:				
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 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
		52	0	52

The student may take 27-31 QHC from the following courses:

RELATED COURSES:

BIO 101	General Biology	3	4	5
BIO 121	Anatomy and Physiology I	4	2	5
BIO 104	Microbiology	3	2	4
BIO 122	Anatomy and Physiology II	4	2	5
BIO 206	Advanced Physiology	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
ORI 101	College Orientation	1	0	1
		51	28	65

WORK EXPERIENCE: *0*

ELECTIVES: *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, 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

		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
RELATED COURSES:		0	0	0	0
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:					*18*
AWARD:					Certificate

HOMEMAKER/HOME HEALTH AIDE
V-146

The Homemaker/Home Health Aide curriculum prepares graduates to provide basic health and personal care for infants, children, mothers, young adults, middle-aged adults, and the elderly in the home setting. The curriculum emphasizes growth and development throughout the life span; communication; nutrition; therapeutic activities; accident and fire safety; usage and maintenance and medication; household, environment and equipment management; family resources and services; and employment skills.

Clinical experience may be obtained through nursing and home health agencies, health departments, skilled and intermediate care facilities, family care homes, homes for the aged and disabled, adult day care centers, child day care centers, and child care facilities.

Graduates may be employed in private homes, home health agencies, long-term care facilities, adult day care centers, senior centers, retirement homes, life-care facilities, and social service agencies which serve individuals of all ages. In some clinical settings the graduates will work under the supervision of licensed personnel.

COURSE AND HOUR REQUIREMENTS

		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
MAJOR COURSES					
HHA 1001	Home Health	8	8	12	16
RELATED COURSES:					
ORI 101	College Orientation	1	0	0	1
GENERAL EDUCATION:		0	0	0	0
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:					*17*
AWARD:					Certificate

HOSPITALITY/TOURISM SPECIALTY
T-213

The Hospitality/Tourism curriculum is designed to familiarize the student with all components of the hospitality industry: (1) Foodservice, (2) Lodging, (3) Travel and (4) Recreation. Hospitality will be emphasized as a top priority for promoting tourism and operating tourism-related business. Economics, laws, and management practices are also components of the curriculum. The curriculum includes general education, courses in the field of communications, and human relations. Work experience in the field is offered to give the student first hand experience in the industry.

Employment opportunities are available in hotels, motels, bed-and-breakfast establishments, recreational facilities, restaurants, and tourist information centers.

Specific jobs include sales clerk, desk clerk, waiter/waitress, welcome center attendant, restaurant hostess and campground attendant. With further training, a student may seek a higher level as a management trainee in related fields.

COURSE AND HOUR REQUIREMENTS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
MAJOR COURSES:						
FSO	102	Introduction to Food Preparation	2	8	0	6
HPT	101	Introduction to Hospitality	3	0	0	3
HPT	102	Guest and Customer Relations	3	0	0	3
HPT	103	Tourism and the Local Community	5	0	0	5
HPT	104	Lodging Operations	3	0	0	3
HPT	105	The Economics of Travel and Tourism	5	0	0	5
HPT	106	Hospitality Marketing and Promotion	3	0	0	3
HPT	107	Park and Campground Management	3	0	0	3
HPT	108	Hospitality Law	5	0	0	5
HPT	109	Travel Management	2	6	0	5
REC	108	Introduction to Recreation	3	0	0	3
			37	14	0	44
RELATED COURSES:						
BUS	110	Office Machines	1	2	0	2
EDP	107	Data Management in Small Business	3	2	0	4
ORI	101	College Orientation	1	0	0	1
POL	105	Regional Geography and Culture	3	0	0	3
			8	4	0	10

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 Relations	3	0	0	3
		16	0	0	16
WORK EXPERIENCE:					
COE 102	Cooperative Work Experience	0	0	20	2
ELECTIVES:		3	0	0	3
TOTAL CREDITS:					*75*
AWARD:					Diploma

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

		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 1104	Machine Shop Theory and Practice IV	2	0	6	4
MEC 1105	Machine Shop Theory and Practice V	2	0	6	4
MEC 1106	Machine Shop Theory and Practice VI	2	0	6	4
MEC 1107	Machine Shop Theory and Practice VII	2	0	6	4
MEC 1108	Machine Shop Theory and Practice VIII	2	0	6	4
MEC 1118	Introduction to Metals	3	0	0	3
MEC 1119	Applied Metallurgy	2	0	3	3
DFT 1104	Blueprint Reading: Machinist I	1	2	0	2
DFT 1106	Blueprint Reading: Machinist II	1	2	0	2
		23	4	51	42

RELATED COURSES:

DFT 1105	Blueprint Reading and Sketching	1	2	0	2
ISC 1101	Industrial Safety	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
ORI 101	College Orientation	1	0	0	1
WLD 1101	Basic Welding	1	0	3	2
	Related Elective	4	0	0	4
		19	4	3	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	0	2	9

WORK EXPERIENCE: *0*

RELATED ELECTIVES:

BUS 237	Small Business Management	5	0	0	5
ELC 1110	Basic Electricity	1	0	3	2
MAT 1113	Estimating: Mechanical	4	0	0	4
PHY 1102	Applied Science II	3	2	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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
MAS	100	Masonry Shop I	5	0	15	10
OR						
	MAS	*1000A Masonry – Mortar Mixing Techniques*	*1*	*0*	*3*	*2*
	MAS	*1000B General Masonry Procedures*	*2*	*0*	*6*	*4*
	MAS	*1000C Masonry – Laying to Line*	*2*	*0*	*6*	*4*
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
OR						
	MAS	*1001A – Fundamental Skill Development and Bond Layout*	*1*	*0*	*3*	*2*
	MAS	*1001B Fireplace Construction*	*2*	*0*	*6*	*4*
	MAS	*1001C Ornamental Masonry Techniques*	*2*	*0*	*6*	*4*
DFT	1131	Drafting: Building Trades	1	0	3	2
ENG	1111	Reading Comprehension	2	0	0	2
BUS	237	Small Business Management	5	0	0	5
			13	0	18	19

THIRD QUARTER						
MAS	1020	Related Trowel Trades	5	0	15	10
OR						
	MAS	*1020A Fundamentals of Stucco*	*1*	*0*	*3*	*2*
	MAS	*1020B Assimilated Brickwork*	*2*	*0*	*6*	*4*
	MAS	*1020C Assimilated Rockwork*	*2*	*0*	*6*	*4*
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
OR						
	MAS	*1005A Stick-On Stone Construction*	*1*	*0*	*3*	*2*
	MAS	*1005B Field Stone Construction*	*2*	*0*	*6*	*4*
	MAS	*1005C Sized Stone Construction*	*2*	*0*	*6*	*4*
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

AWARD: Diploma

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 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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER (Fall)						
MLT	102	Hematology I	3	4	0	5
MLT	107	Clinical Chemistry I	3	0	0	3
MLT	123	Microbiology I	3	2	0	4
ENG	101	Language and Composition I	5	0	0	5
ORI	101	College Orientation	1	0	0	1
BIO	121	Anatomy and Physiology I	4	2	0	5
			19	8	0	23
SECOND QUARTER (Winter)						
MLT	114	Immunohematology I	3	2	0	4
MLT	124	Hematology I	1	4	0	3
MLT	125	Microbiology II	3	2	0	4
BIO	122	Anatomy and Physiology II	4	2	0	5
CHM	103	MLT Chemistry I	3	2	0	4
EDP	102	Computer Literacy for Beginners	1	2	0	2
			15	14	0	22

THIRD QUARTER (Spring)

MLT 112	Clinical Chemistry II	3	0	0	3
MLT 118	Immunohematology II	1	2	0	2
MLT 126	Urinalysis/Parasitology	2	4	0	4
CHM 104	MLT Chemistry II	3	2	0	4
MAT 112	College Mathematics	5	0	0	5
PSY 109	Human Relations	3	0	0	3
		17	8	0	21

FOURTH QUARTER (Summer)

MLT 211	Instrumentation	2	0	0	2
MLT 213	Clinical Experience I	0	0	30	10
ENG 204	Oral Communications	3	0	0	3
		5	0	30	15

FIFTH QUARTER (Fall)

MLT 214	Clinical Experience II	0	0	30	10
ENG 102	Language and Composition II	5	0	0	5
		5	0	30	15

SIXTH QUARTER (Winter)

MLT 215	Clinical Experience III	0	0	30	10
ENG 103	Report Writing	3	0	0	3
		3	0	30	13

SEVENTH QUARTER (Spring)

MLT 216	Clinical Experience IV	0	0	30	10
SOC 101	Introduction to Sociology	3	0	0	3
MLT 217	MLT Special Topics	2	0	0	2
		5	0	30	15

AWARD: *Associate of Applied Science Degree*

Admissions Procedures:
The applicant must:

1. Complete the application for admission to the College.
2. Be a high school graduate or have earned a high school equivalency diploma (GED).
3. Pass all three components of the College's Allied Health Admissions test or equivalent, or have SAT composite scores of 800 or ACT composite scores of 18.
4. Have a grade point average of 2.0 or higher on a 4.0 scale on the most recent academic work.
5. Submit official copies of transcripts or records of high school and/or acceptance GED scores. These should be sent directly from institutions.

6. Have a personal interview which will be conducted using objective evaluation methods. (Applicants will be notified of dates and times)
7. Submit two recommendations/references.
8. Students who are selected for the program must also submit the College's physical examination, dental and immunization report completed by the appropriate personnel.

Due to the program's limited enrollment, applications should be completed and submitted with all requested information as early as possible.

*Transfer agreement with Asheville-Buncombe Technical Community College (ABTCC)

The program is designed for students to transfer to ABTCC at the start of the fourth quarter. Due to clinical restrictions, all SCC students may not be able to transfer at the beginning of the fourth quarter. If this were to occur, then the SCC clinical sites would be activated for use.

ADVANCED CERTIFICATE PROGRAMS

MEDICAL TRANSCRIPTION — A certificate of Advanced Training is granted to experienced clerical personnel who complete a series of five courses leading to competency as a medical transcriptionist. Medical Transcriptionists translate dictaphone tapes which have been recorded by medical professionals into comprehensive typed records of patient care and treatment.

MEDICAL CODING — A certificate of Advanced Training is granted to experienced clerical personnel who complete a series of five courses leading to competency as a medical coder. Medical coders translate medical diagnosis into standard government codes ICD-9-CM and CPT-4 insuring proper payment to hospitals and clinics.

NURSING ASSISTANT
V-072

The Nursing Assistant curriculum prepares graduates to assist registered and practical nurses and physicians in carrying out nursing care and services for patients. The nursing assistant performs health care procedures such as bathing and feeding patients, providing comfort measures, positioning patients, preparing patients for physical examinations and special tests, observing and recording vital signs, admitting, transferring and discharging patients, and collecting specimens.

Graduates may be employed in homes, hospitals, clinics, doctors' offices, nursing homes and extended care facilities.

Individuals desiring a career as a nursing assistant should, if possible, take English, biology and social science courses prior to entering the program.

COURSE AND HOUR REQUIREMENTS		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
MAJOR COURSES:					
NUR 1111	Nurse Assistant I	2	2	6	5
NUR 1112	Nurse Assistant Practicum II	3	4	9	8
NUR 1113	Home Care	2	2	0	3
		7	8	15	16
RELATED COURSES:					
ORI 101	College Orientation	1	0	0	1
GENERAL EDUCATION:		0	0	0	0
WORK EXPERIENCE:		0	0	0	0
ELECTIVES:		0	0	0	0
TOTAL CREDITS:					17
AWARD:					Certificate

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 (4) quarters have received fundamental preparation in nursing enabling them to be eligible to take the licensing examination (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 licensing examination (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: (1) participate in assessing the patient's physical and mental health; (2) record and report the results of the nursing assessment; (3) participate in implementing the health care plan; (4) reinforce the teaching and counseling of a registered nurse, physician, or dentist; and (5) 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 medically delegated procedures utilizing the principles and theories of nursing and the sciences. The associate degree graduate is prepared to: (1) assess the patient's physical and mental health; (2) record and report the results of the nursing assessment; (3) plan, initiate and deliver and evaluate appropriate nursing acts; (4) teach, delegate to or to supervise other personnel in implementing the treatment regimen; (5) collaborate with other health care providers in determining the appropriate health care for a patient; (6) implement the treatment and pharmaceutical regimen prescribed by any person authorized by State law to prescribe such a regimen; (7) provide teaching and counseling about the patient's health care; (8) report and record the plan for care, nursing care given, and the patient's response to that care; and (9) supervise, teach and evaluate those who perform or are preparing to perform nursing functions.

The central objective of this curriculum is to prepare practitioners of nursing who will be competent to assume the functions of their level of practice and to provide in their educational program a career choice

commensurate with their individual needs, abilities, and mobility that will enable them to spend their energies on continued education for personal growth and development, as well as professional proficiency.

NUR prefix courses are open only to persons accepted into the T-116 Nursing Education Options Curriculum and must be taken in the sequence as listed. Non-nursing courses may be taken prior to or during the quarter listed.

CURRICULUM BY QUARTERS

		HOURS			
		Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER					
NUR 101	Fundamentals of Nursing	6	4	3	9
BIO 121	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					
NUR 102	Medical-Surgical Nursing I	6	0	12	10
MAT 112	College Mathematics	5	0	0	5
BIO 122	Anatomy and Physiology II	4	2	0	5
		15	2	12	20
THIRD QUARTER					
NUR 103	Medical-Surgical Nursing II	6	0	12	10
NUR 107	Pharmacology	3	0	0	3
ENG 101	Language and Composition I	5	0	0	5
		14	0	12	18
FOURTH QUARTER					
NUR 104	Maternal-Child Health Nursing	6	0	15	11
BIO 104	Microbiology	3	2	0	4
EDP 102	Computer Literacy for Beginners	1	2	0	2
		10	4	15	17
**FIFTH QUARTER*					
NUR 204	Adv Maternal-Child Health Nursing	6	0	15	11
OR					
NUR 205	Psychiatric Nursing	5	0	12	9
SOC 101	Introduction to Sociology	3	0	0	3
BIO 206	Advanced Physiology	4	2	0	5
		13	2	15	19
		or 12	2	12	17

SIXTH QUARTER						
NUR 202	Medical-Surgical Nursing III	5	0	15	10
ENG 102	Language and Composition II	5	0	0	5
		10	0	15	15
**SEVENTH QUARTER*						
NUR 204	Adv Maternal-Child Health Nursing	6	0	15	11
OR						
NUR 205	Psychiatric Nursing	5	0	12	9
ENG 204	Oral Communications	3	0	0	3
		9	0	15	14
		or 8	1	12	12
EIGHTH QUARTER						
NUR 203	Medical-Surgical Nursing IV	5	0	15	10
NUR 206	Nursing Seminar	2	0	0	2
		7	0	15	12

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

AWARD: Associate of Applied Science Degree

ADDITIONAL INFORMATION:

Region A Nursing Consortium offers quarters one through four (NEO I) at each of the three consortium-member colleges: Haywood Community College, Southwestern Community College, and Tri-County Community College. The nursing courses in quarters 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 college of enrollment unless otherwise arranged. All students completing the eighth quarter are awarded an Associate Degree in Nursing from the home college 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 other 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.

ENTRANCE REQUIREMENTS

1. Must be a high school graduate or equivalent.
2. Must submit transcripts of high school, equivalency, and post high school education.

3. Must have completed one unit each of algebra, biology, and chemistry with an average of "C" or better in each.
4. Must satisfactorily complete the Allied Health Admissions test.
5. Must submit complete dental, physical, and immunization records as well as any other physical or mental health requirements deemed necessary.
6. Must submit two personal recommendations.
7. Must have a personal interview.

Due to new admissions policies being considered at the time of printing, student's should contact the admissions office or the nursing faculty for current requirements and procedures.

ADMISSIONS REQUIREMENTS AND PROCEDURES FOR FIRST YEAR APPLICANTS:

Phase I

1. Complete the application for admission to the desired college.
2. Submit official copies of transcripts or records of high school and/or acceptable GED scores and all post secondary schools.
   a. 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.)
3. Satisfactory scores on the college admission test.
   a. A 90-day waiting period is required before retesting.
   b. SAT scores of 400 on verbal and 400 on math will be acceptable in lieu of the college admissions test.
   c. ACT scores of 18 on English and 18 on math will be acceptable in lieu of the college admissions test.
   d. The time limit for expiration of all test results for admission to the NEO program will be five years.
4. Two acceptable recommendations.

NOTE: Preference will be given to residents of the primary service area of each college until March 15, to residents of North Carolina until May 30, after which admissions is open to any qualified applicant.

Phase II (Must be dated within the 90 days prior to enrollment)

1. Submit the college's physical examination report completed by a physician.
2. Submit the college's dental report completed by a dentist, and immunization report completed by health clinic personnel or physician.

3. Attend individual interviews. (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 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.

ADMISSION REQUIREMENTS AND PROCEDURES FOR SECOND YEAR APPLICANTS

1. Meet the admissions requirements for first year applicants.
2. Hold a current Practical Nurse License.
3. Have a quality point ratio of 2.00 or above in PNE or First Year NEO Program.
4. Complete the following courses with a grade of "C" or above: General Psychology, English 101 (or equivalent), Microbiology, Nursing Transition.

   NOTE: At this point, acceptance will be made on a first come, first served basis. Preference will be given to residents of the primary service area of each college (see Application Process).

The following steps must be dated within 90 days of the institution's regular registration date:

5. Submit a physical examination report completed by a physician.
6. Submit dental report completed by a dentist, and immunization report completed by health clinic personnel, or physician.
7. Attend individual interviews with NEO instructors. (Applicants will be notified of dates and time.)

   NOTE: (1) Failure to complete all steps 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 applicant.

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 DECISION PROCESS FOR NEO SECOND YEAR APPLICANTS FOR THOSE COMPLETING REQUIREMENTS BY THE END OF SUMMER QUARTER.

Prospective nursing candidates residing in the seven most western counties of North Carolina should apply to their respective institutions. Other applicants may apply to the institution of their convenience.

Residents from the seven most western counties who successfully complete admission requirements 1 through 4, by the end of summer quarter, will be given first priority for admission to their respective institutions. Openings will be filled as they occur based on completion dates.*

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

Openings that develop after qualified applicants from the service areas of all consortium institutions have been served will be filled on the basis of completion dates, first by applicants from other North Carolina counties, then by any other applicants.

*Any duplication of completion dates will be resolved on the basis of highest average on NEO prerequisite courses (General Psychology, English 101, Microbiology, Nursing Transition.)

FOR THOSE COMPLETING REQUIREMENTS AFTER THE END OF SUMMER QUARTER

Any person completing the admissions requirements after the end of the summer quarter will be placed on a waiting list as of the date that verification of completions was received. Should sufficient openings develop, they will be filled on the basis of this date. Priority will be given to service area applicants first, then other North Carolina residents, then out-of-state residents.

ADMISSION/RE-ENTRY PRIORITIES

Priority for Admission to NEO I or NEO II will be given as follows:

1. New entering students.

2. Re-entering students in good standing.
3. Students with a grade of less than "C" in any NUR prefix course(s) but with a QPR greater than 2.0.
4. Students with a QPR of less than 2.0.

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

INTRA-CONSORTIUM TRANSFER RE-ENTRY POLICY

1. All requests for transfer from one consortium member college to another (including re-entry transfers) into the nursing program must be approved by the NEO Steering Committee prior to implementation.
2. No student will be allowed to transfer between NEO Consortium colleges in order to improve grade standing.

PROGRESSION POLICIES

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

1. 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. HCC utilizes the same policies for both first and second year.
2. To remain in good standing, all students in the program are required to maintain a cumulative quality point ratio of "C" (2.0 quality points).
3. 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.
   a. The student may continue to take non-nursing courses in the NEO curriculum according to established eligibility.
4. In order to successfully complete any nursing course with a clinical component, the student must:
   a. Earn a grade of "C" or better in the theoretical (classroom) component, and;
   b. Earn a grade of "C" or better in the clinical component as well as in any graded lab component;
   c. 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;

d. 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.

5. 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 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.

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	2	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 I	1	4	3
			18	8	22

THIRD QUARTER

ENG	204	Oral Communications	3	0	3
LEX	220	Legal Research II	3	2	4
LEX	211	Title Abstracting	3	2	4
LEX	212	Real Property	5	0	5
***	***	Social Science Elective	5	0	5
			19	4	21

FOURTH QUARTER

LEX	232	Estate Administration	3	2	4
LEX	201	N.C. Legal Systems	3	2	4
LEX	210	Mechanics of Property Transactions	3	2	4
***	***	Elective	5	0	5
			14	6	17

FIFTH QUARTER

LEX	111	Torts	5	0	5
LEX	113	Family Law	4	2	5
LEX	208	Criminal Law	5	0	5
BUS	202	Word Processing Systems I	1	4	3
			15	6	18

SIXTH QUARTER

LEX	107	Criminal Evidence and Procedure	4	2	5
LEX	110	Civil Procedure	3	4	5
LEX	203	Administrative Law	3	0	3
LEX	215	The Law Office	3	0	3
EDP	104	Introduction to Data Processing	3	2	4
			16	8	20

SEVENTH QUARTER

COE	102	Cooperative Work Experience	0	20	2
		or			
LEX	112	Supervised Work Experience	0	20	2
			0	20	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 free elective.

AWARD: *Associate of Applied Science Degree.*

PHYSICAL THERAPIST ASSISTANT
T-062

The Physical Therapist Assistant curriculum prepares the graduate to assist the professional physical therapist in a variety of direct patient care services, delegated by the supervising therapist, to restore function by alleviation or prevention of physical impairment and other activities essential to the operation of a physical therapy service. The graduate is eligible to take the licensing examination given by the North Carolina Board of Physical Therapy Examiners.

Employment opportunities are available in general hospitals, rehabilitation centers, extended care facilities, specialty hospitals, home health agencies, private clinics and public school systems.

Suggested preparatory courses for individuals desiring a career in physical therapy assisting would include biology, algebra and possibly chemistry.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
ORI	101	College Orientation	1	0	0	1
ENG	110	Freshman Composition I	5	0	0	5
MLT	110	Medical Terminology	3	0	0	3
BIO	121	Anatomy and Physiology I	4	2	0	5
PTH	101	Introduction to Physical Therapy	3	2	0	4
			16	4	0	18
SECOND QUARTER						
ENG	112	Freshman Composition II	5	0	0	5
MAT	112	College Mathematics	5	0	0	5
BIO	122	Anatomy and Physiology II	4	2	0	5
PTH	102	Physical Therapy Procedures I	3	2	6	6
			17	4	6	21
THIRD QUARTER						
ENG	103	Report Writing	3	0	0	3
EDT	102	Management of Medical Emergencies	2	2	0	3
BIO	206	Advanced Physiology	4	2	0	5
PTH	103	Physical Therapy Procedures II	3	2	6	6
			12	6	6	17

FOURTH QUARTER					
PTH 104	Pathology - Physiology for PT Assistants	3	0	0	3
PTH 105	Functional Anatomy	2	4	0	4
PTH 106	Therapeutic Exercise	3	6	0	6
		8	10	0	13
FIFTH QUARTER					
PSY 103	General Psychology	5	0	0	5
PTH 201	Psychology of Adjustment (PT)	3	0	0	3
PTH 202	Physical Therapy Procedures III	3	0	12	7
	Elective	1	0	0	1
		12	0	12	16
SIXTH QUARTER					
SOC 102	Principles of Sociology	5	0	0	5
PTH 203	Community Health and Welfare	3	0	0	3
PTH 204	Physical Therapy Procedures IV	3	0	12	7
		11	0	12	15
SEVENTH QUARTER					
PTH 205	Seminar in Physical Therapy Procedures	3	0	0	3
PTH 206	Clinical Education	0	0	33	11
		3	0	33	14

AWARD: *Associate of Applied Science Degree*

ADMISSIONS PROCEDURES

The applicant must:

1. Complete the application for admission to the College.
2. Be a high school graduate or have earned a high school equivalency diploma (GED).
3. Pass all three components of the College's Allied Health Admissions test or equivalent, or have SAT composite scores of 800 or ACT composite scores of 18.
4. Have a quality point ratio of 2.0 or higher on a 4.0 scale of the most recent academic work.
5. Submit official copies of transcripts or records of high school and/or acceptable GED scores. These should be sent directly from institutions.
6. Have a personal interview which will be conducted using objective evaluation methods. (Applicants will be notified of dates and times)

7. Submit two recommendations/references.
8. Students who are selected for the program must also submit the College's physical examination, dental and immunization report completed by the appropriate personnel.

Due to the program's limited enrollment, applications should be completed and submitted with all requested information as early as possible.

PLUMBING AND PIPEFITTING
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.

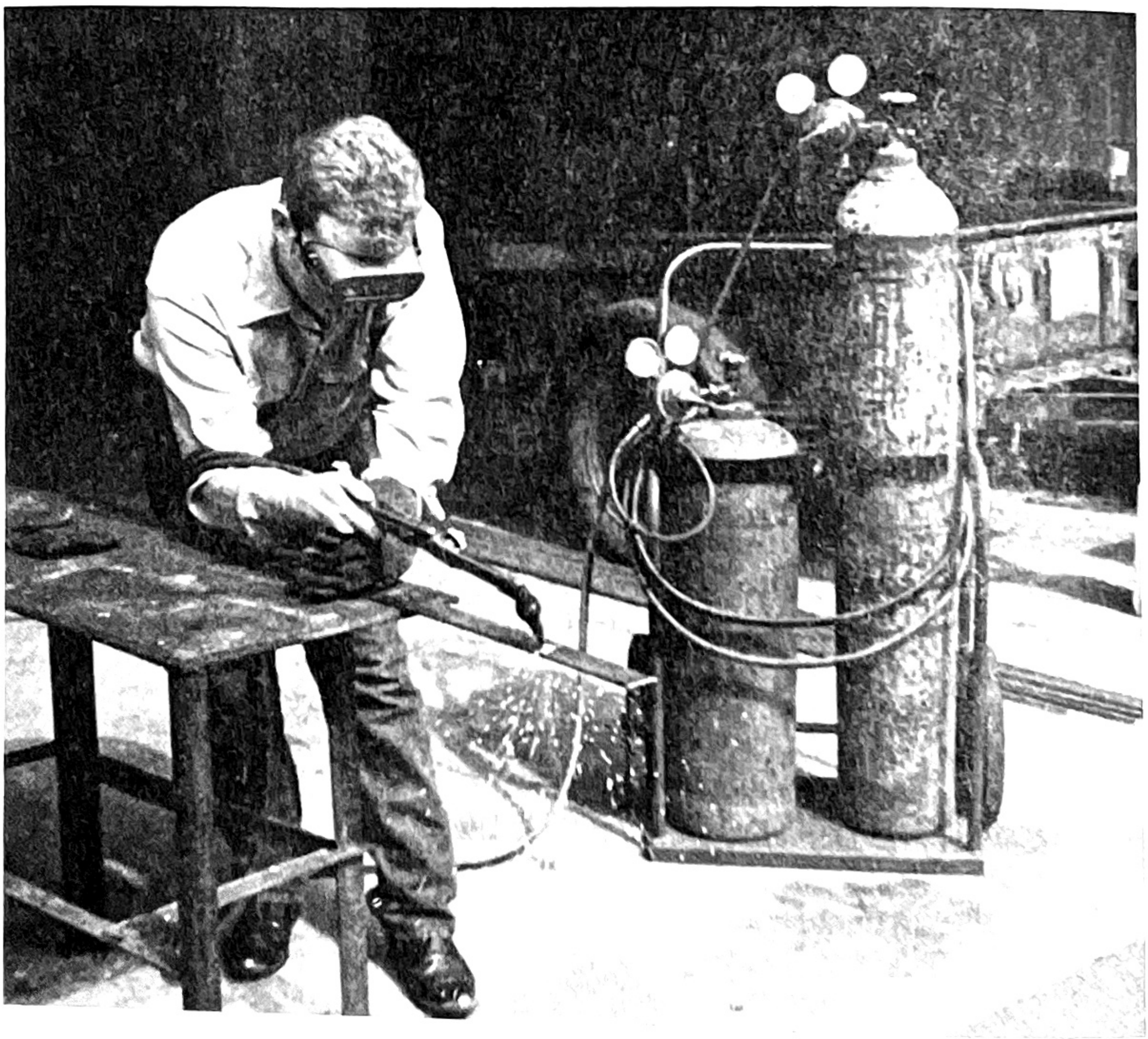
Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air or other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures,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

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
PLU	1101	Plumbing Pipework	5	0	15	10
or						
PLU	*1101A*	*Plumbing Pipework I*	*2*	*0*	*6*	*4*
PLU	*1101B*	*Plumbing Pipework II*	*3*	*0*	*9*	*6*
DFT	1110	Blueprint Reading: Building Trades	1	0	3	2
MAT	1112	Mathematics: Building Trades	2	0	0	2
ORI	101	College Orientation	1	0	0	1
ELC	1110	Basic Electricity	1	0	3	2
			10	0	21	17
SECOND QUARTER						
PLU	1111	Domestic Hot and Cold Water Systems	5	0	15	10
or						
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*
DFT	1115	Blueprint Reading: Plumbing Trades	3	0	0	3
DFT	1122	Blueprint Reading and Sketching: Mechanical	1	0	3	2
			9	0	18	15

THIRD QUARTER					
PLU 1115	Drainage Systems: Residential	4	0	12	8
or					
PLU 1115A	*Drainage Systems: Residential I*	*2*	*0*	*6*	*4*
PLU 1115B	*Drainage Systems: Residential II*	*2*	*0*	*6*	*4*
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
or					
PLU 1116A	*Commercial Systems I*	*2*	*0*	*6*	*4*
PLU 1116B	*Commercial Systems II*	*3*	*0*	*9*	*6*
MAT 1105	Estimating: Plumbing Trades	3	0	0	3
PSY 109	Human Relations	3	0	0	3
WLD 1101	Basic Welding	1	0	3	2
		12	0	18	18

AWARD: *Diploma*



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 and also 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.

CURRICULUM BY QUARTERS

		HOURS		
		Class	**Lab**	**Credit**
FIRST QUARTER				
ENG 101	Language and Composition I	5	0	5
BUS 102	Typing I	1	4	3
RTV 201	Introduction to Telecommunications	5	0	5
RTV 203	Expression in the Media	5	0	5
ORI 101	College Orientation	1	0	1
		17	4	19
SECOND QUARTER				
ENG 102	Language and Composition II	5	0	5
RTV 204	Radio Production	2	4	4
RTV 206	Writing for the Media	5	0	5
MAT 105	Introduction to Algebra	5	0	5
		17	4	19
THIRD QUARTER				
ENG 204	Oral Communications	3	0	3
MAT 111	Applied Trigonometry	5	0	5
RTV 116	Broadcast Announcing	3	2	4
RTV 207	Television Production I	5	4	7
		16	6	19

FOURTH QUARTER

ELC	109	Fundamentals of AC and DC	3	2	4
RTV	209	Television Production II	2	10	7
RTV	205	Broadcast Programming	3	0	3
***	***	Technical Elective	3	0	3
			11	12	17

FIFTH QUARTER

RTV	218	Broadcast Law	5	0	5
RTV	211	Broadcast Journalism	3	4	5
RTV	202	Sales and Promotion	5	0	5
SOC	102	Principles of Sociology	5	0	5
***	***	Computer Elective	3	0	3
			21	4	23

SIXTH QUARTER

RTV	243	Public Relations and the Media	5	0	5
RTV	221	Troubleshooting Broadcast Equipment	3	2	4
RTV	212	Broadcast Management	5	0	5
EDP	115	Computer Graphics	3	2	4
***	***	General Education Elective	4	0	4
			20	4	22

SEVENTH QUARTER

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

AWARD: *Associate of Applied Science Degree*

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 radiographic techniques to accurately demonstrate anatomical structures on a radiograph for the purpose of evaluating technique, positioning and other pertinent technical qualities; by exercising discretion and judgement 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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER						
BIO	121	Anatomy and Physiology I	4	2	0	5
ENG	110	Freshman Composition I	5	0	0	5
MAT	112	College Mathematics	5	0	0	5
RDT	115	Introduction to Radiologic Technology	3	0	0	3
RDT	105	Patient Care/Medical Ethics	3	0	0	3
ORI	101	College Orientation	1	0	0	1
			21	2	0	22
SECOND QUARTER						
BIO	122	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
MLT 110	Medical Terminology	3	0	0	3
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
		12	6	15	20
FOURTH QUARTER					
RDT 109	Positioning III	3	4	0	5
RDT 110	Radiation Protection/Biology	3	0	0	3
RDT 118	Principles of Exposure III	2	2	0	3
RDT 113	Clinical Education III	0	0	24	8
		8	6	24	19
FIFTH QUARTER					
PSY 103	General Psychology	5	0	0	5
RDT 201	Radiologic Physics I	3	0	0	3
RDT 205	Special Procedures I	3	0	0	3
RDT 215	Clinical Education IV	0	0	24	8
		11	0	24	19
SIXTH QUARTER					
RDT 200	Management of Radiographic Emergencies	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	33	11
		3	0	33	14

AWARD: *Associate of Applied Science Degree*

ADMISSIONS PROCEDURE

The applicant must:

1. Complete the application for admission to the College.

2. Be a high school graduate or have earned a high school equivalency diploma (GED).
3. Pass all three components of the College's Allied Health Admissions test or equivalent, or have SAT composite scores of 800 or ACT composite scores of 18.
4. Have a quality point ratio of 2.0 or higher on a 4.0 scale of the most recent academic work.
5. Submit official copies of transcripts or records of high school and/or acceptable GED scores. These should be sent directly from institutions.
6. Have a personal interview which will be conducted using objective evaluation methods. (Applicants will be notified of dates and times)
7. Be eighteen (18) years of age by the start of the second quarter of the year admitted to the program.
8. Submit two recommendations/references.
9. Students who are selected for the program must also submit the College's physical examination, dental and immunization reports completed by the appropriate personnel.

Due to the program's limited enrollment, applications should be completed and submitted with all requested information as early as possible.



REAL ESTATE
T-127

The purposes of the Real Estate curriculum are to prepare the individual to enter the real estate industry, provide an educational program for persons directly involved in various phases of the real estate industry, and 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, development, 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**	**Shop**	**Credit**
MAJOR COURSES:					
BUS 120	Accounting I	4	2	0	5
BUS 121	Accounting II	4	2	0	5
BUS 124	Construction Methods and Materials	3	0	0	3
BUS 232	Sales Development	3	2	0	4
BUS 275	Land Use and Development	3	0	0	3
BUS 285	Real Estate Market Valuation	3	0	0	3
BUS 289	Real Estate Law	4	0	0	4
BUS 290	Real Estate Finance	3	0	0	3
BUS 291	Fundamentals of Real Estate	6	0	0	6
BUS 292	Real Estate Brokerage Operations	3	0	0	3
BUS 296	Real Estate Ethics	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
	Technical Elective	3	0	0	3
		52	6	0	55

RELATED COURSES:

BUS 101	Introduction to Business	5	0	0	5
BUS 102	Typing I	1	4	0	3
BUS 115	Business Law	5	0	0	5
BUS 239	Marketing	5	0	0	5
BUS 248	Business Economics I	5	0	0	5
EDP 102	Computer Literacy for Beginners	1	2	0	2
MAT 110	Business Math	5	0	0	5
ORI 101	College Orientation	1	0	0	1
	Related Elective	3	0	0	3
		31	6	0	34

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 Relations	3	0	0	3
	Social Science Elective	3	0	0	3
		19	0	0	19

WORK EXPERIENCE:

TECHNICAL ELECTIVES:

BUS 141	Current Trends - Financial	3	0	0	3
BUS 259	Managerial Planning	3	0	0	3
COE 101	Cooperative Work Experience	0	0	10	1
COE 102	Cooperative Work Experience	0	0	20	2
EDP 107	Data Management in Small Business	3	2	0	4

AWARD: *Associate of Applied Science Degree*

RESPIRATORY CARE TECHNOLOGY
(Technician and/or Therapist)
T-091

Respiratory Care Technology offers career education for individuals interested in becoming a respiratory therapy technician or respiratory therapist.

The respiratory therapist is qualified to assume primary responsibility for respiratory and cardiac care, including the supervision of technicians. The therapist makes patient care decisions concerning the use of life-support systems, oxygen therapy and other breathing treatments. They also perform heart and lung studies. Graduates of the therapist program receive an associate degree.

The technician performs tasks which include oxygen therapy, breathing treatments and equipment maintenance. Graduates of the technician program receive a diploma.

Graduates of accredited programs are eligible to apply for admission to the entry-level examination. Graduates of an accredited therapist program are also eligible to take the advanced practitioner examinations. These examinations are given by the National Board for Respiratory Care.

Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Clinic**	**Credit**
FIRST QUARTER						
BIO	121	Anatomy and Physiology I	4	2	0	5
ENG	110	Freshman Composition I	5	0	0	5
ORI	101	College Orientation	1	0	0	1
RTH	101	Orientation to Respiratory Therapy	4	4	0	6
			14	6	0	17
SECOND QUARTER						
BIO	122	Anatomy and Physiology II	4	2	0	5
ENG	112	Freshman Composition II	5	0	0	5
RTH	105	Theories and Principles I	3	2	0	4
RTH	111	Clinical Experience I	0	0	15	5
CHM	101	Chemistry I	3	4	0	5
			15	8	15	24

THIRD QUARTER

RTH 204	Pulmonary Functions	2	2	0	3
RTH 106	Pathophysiology	2	2	0	3
RTH 112	Clinical Experience II	0	0	18	6
RTH 108	Theories and Principles II	2	2	0	3
RTH 103	Cardiopulmonary Anatomy and Physiology	3	2	0	4
		9	8	18	19

FOURTH QUARTER

RTH 113	Clinical Experience III	0	0	27	9
BIO 104	Microbiology	3	2	0	4
RTH 109	Pharmacology	2	0	0	2
		5	2	27	15

FIFTH QUARTER

RTH 216	Clinical Experience 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	2	2	0	3
		7	4	18	15

SIXTH QUARTER

RTH 217	Clinical Experience V	0	0	27	9
RTH 206	Neonatal/Pediatric Respiratory Care	2	2	0	3
MAT 112	College Mathematics	5	0	0	5
EDP 102	Computer Literacy for Beginners	1	2	0	2
		8	4	27	19

SEVENTH QUARTER

RTH 218	Clinical Experience VI	0	0	27	9
RTH 220	Respiratory Therapy Department Operations	2	0	0	2
PSY 103	General Psychology	5	0	0	5
RTH 226	Registry Review Seminar	3	0	0	3
		10	0	27	19

RESPIRATORY THERAPIST AWARD: Associate of Applied Science Degree

RESPIRATORY TECHNICIAN AWARD: Diploma

ADMISSIONS PROCEDURE

The applicant must:

1. Complete the application for admission to the College.

2. Be a high school graduate or have earned a high school equivalency diploma (GED).
3. Pass all three components of the College's Allied Health Admissions test or equivalent, or have SAT composite scores of 800 or ACT composite scores of 18.
4. Have a quality point ratio of 2.0 or higher on a 4.0 scale of the most recent academic work.
5. Submit official copies of transcripts or records of high school and/or acceptable GED scores. These should be sent directly from institutions.
6. Have a personal interview which will be conducted using objective evaluation methods. (Applicants will be notified of dates and times)
7. Submit two recommendations/references.
8. Students who are selected for the program must also submit the College's physical examination, dental and immunization report completed by the appropriate personnel.

Due to the program's limited enrollment, applications should be completed and submitted with all requested information as early as possible.

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

		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 1117	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 Work Experience	0	20	0	2
ELECTIVES:				0
TOTAL CREDITS:				77
AWARD:				Diploma

SURVEYING TECHNOLOGY
T-125

This 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

			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	0	6	2
DFT	105	Surveying Drafting	4	4	0	6*
MAT	111	Applied Trigonometry	5	0	0	5*
DFT	106	Civil Drafting	2	0	6	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	5	0	0	5*
MAT	105	Introduction to Algebra	5	0	0	5*
			27	8	12	35

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 OPTION*

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, technical colleges or technical institutes.

COURSE AND HOUR REQUIREMENTS

			HOURS		
			Class	**Lab**	**Credit**
MAJOR COURSES:					
Specialty Skills					
(Awarded toward experience in the field)					48
20 hours 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 the 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

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
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 of 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.

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.

CURRICULUM BY QUARTERS

			HOURS			
			Class	**Lab**	**Shop**	**Credit**
FIRST QUARTER						
WLD	1127	Blueprint Reading for Welders	2	0	3	3
WLD	1120	Oxy-Fuel and Arc Welding	4	0	15	9
	OR					
	WLD 1120A	*Basic Oxy-Fuel Cutting*	*1*	*0*	*3*	*2*
	WLD 1120B	*Oxy-Fuel Welding and Brazing*	*1*	*0*	*3*	*2*
	WLD 1120C	*Basic Arc Welding I*	*1*	*0*	*3*	*2*
	WLD 1120D	*Basic Arc Welding II*	*1*	*0*	*6*	*3*
MAT	1101	Fundamentals of Math	5	0	0	5
ORI	101	College Orientation	1	0	0	1
			12	0	18	18
SECOND QUARTER						
WLD	1121	Shielded Metal Arc Welding	4	0	18	10
	OR					
	WLD 1121A	*Advanced Arc Welding "Fillet Welds"*	*2*	*0*	*6*	*4*
	WLD 1121B	*Structural Welding Single Groove with Backing Plate*	*1*	*0*	*6*	*3*
	WLD 1121C	*Structural Welding Single Groove "No Backing Plate"*	*1*	*0*	*6*	*3*
PHY	1101	Applied Science I	3	2	0	4
PSY	109	Human Relations	3	0	0	3
			10	2	18	17

THIRD QUARTER					
WLD 1123	Gas Shielded Arc Welding	5	0	15	10
OR					
WLD 1123A	*Basic Gas Tungsten Arc Welding*	*2*	*0*	*6*	*4*
WLD 1123B	*Advanced Gas Tungsten Arc Welding*	*1*	*0*	*3*	*2*
WLD 1123C	*Basic MIG Welding*	*2*	*0*	*6*	*4*
MAT 1114	Math for Pipefitters and Plumbers	4	0	0	4
ENG 1106	Fundamentals of English	3	0	0	3
MEC 1118	Introduction to Metals	3	0	0	3
		15	0	15	20
FOURTH QUARTER					
WLD 1125	Pipe Welding	3	0	12	7
OR					
WLD 1125A	*Pipe Welding "5G" Position*	*1*	*0*	*3*	*2*
WLD 1125B	*Pipe Welding "2G" Position*	*1*	*0*	*3*	*2*
WLD 1125C	*Pipe Welding "6G" Position*	*1*	*0*	*6*	*3*
WLD 1128	Certification Practices and Mechanical Testing	3	0	12	7
OR					
WLD 1128A	*SMAW Practice and Guided Bend Test "5G" Position*	*1*	*0*	*3*	*2*
WLD 1128B	*SMAW Practice and Guided Bend Test "2G" Position*	*1*	*0*	*3*	*2*
WLD 1128C	*SMAW Practice and Guided Bend Test "6G" Position*	*1*	*0*	*6*	*3*
		6	*0*	*24*	*14*

AWARD: Diploma

COURSE DESCRIPTIONS

COURSE DESCRIPTIONS

AHR-101 Non-Solar Heating Systems (5-4-0-7)

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 (2-2-0-3)

Basic principles of refrigeration; operation of heat pumps; combinations of heating and cooling equipment; cooling towers.

AHR-201 Instrumentation and Controls (3-0-6-5)

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) (2-0-6-4)

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 of refrigerants in charging the system.

AHR-1102 Installation and Maintenance of Total Comfort Systems (3-0-9-6)

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, dehumidifers 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-1104 Fundamentals of Forced Air Heating Systems (2-0-6-4)

An introduction to the fundamentals of heating and heat transfer related to various types of forced air heating systems. Sizes and ratings of different types of furnaces, energy sources, fuels, combustion controls, and components which make up a complete forced air heating system will be covered in detail. Prerequisite: None.

AHR-1105 Fundamentals of Hydronic Heating Systems (2-0-6-4)

An introduction to the fundamentals of heating and heat transfer related to various types of hydronic heating systems. Sizes and ratings of different types of boilers, energy sources, fuels, combustion controls, and components which make up a complete hydronic heating system will be covered in detail. Prerequisite: None.

AHR-1114 Warm Air Systems (1-4-0-3)

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-1116 Heating and Cooling Load Calculations (3-0-0-3)

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-1117 Distribution Design and Duct Fabrication (1-4-0-3)

The use of load calculations to size and design the distribution system and application of layout and fabrication of duct design.

AHR-1118 Distribution Systems: Fabrication and Installation (2-0-6-4)

An analysis of heating and cooling system design including heat loss and gain, equipment sizing, balancing and selection. Study of fabrication, installation, and maintenance of heating and cooling distribution systems using various materials to achieve correct air and/or fluid flow. Course covers safety, fabrication, threading, soldering, fasteners, fans, and insulation.

AHR-1119 Heating and Air Conditioning Servicing (4-0-9-7)

An introduction to the servicing and repair procedures for both warm air heating and air conditioning systems. Emphasis is placed on system diagnosis, start-up and calibration procedures including tests. Repair procedures for the electrical and electronic controls for both heating and air conditioning systems will be covered in detail.

AHR-1120 Air Conditioning Systems (3-0-6-5)

The history, theory, and factors relating to air conditioning are studied. Instruction will include air conditioning terminology, temperature measurement, air movement, humidity, psychometric properties, comfort zone, effective temperature, air diffusion, filtration, and testing instruments. A complete study of both heat pumps and portable units is included in the course. Prerequisite: None.

AHR-1121 Principles of Refrigeration (3-0-6-5)

An introduction to the essential terminology, laws of refrigeration, heat and the methods of heat transfer, the compression system, use and care of tools and equipment, tubing and fittings used in refrigeration systems. Practice will be given in basic refrigeration jobs such as the tube bending, flaring, swaging, identification of fittings, soldering, and use of basic equipment. Prerequisite: None.

AHR-1126 All Year Comfort Systems I: Conventional (4-0-9-7)

A study of the components and their function in a complete conventional heating system. Troubleshooting malfunctions, repair or replacement of components, and complete system adjustment procedures are covered in detail. Prerequisites: AHR 1104, AHR 1105, AHR 1118 or permission of instructor.

AHR-1127 All Year Comfort Systems II: Heat Pumps (4-0-9-7)

Heating and cooling equipment is selected, assembled, installed, wired, calibrated, and tested. Emphasis is placed on the maintenance and servicing of equipment used in the cleaning, changing, humidification, and temperature control of air in an air conditioned space. Shop work involves locating and correcting equipment failures, testing and adjusting heating and cooling equipment to maximum energy conservation. Prerequisites: AHR 1105, AHR 1121, AHR 1126, AHR 1117, or permission of instructor.

ART-100 Art Orientation (1-0-0-1)

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 (5-0-0-5)

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 everyday life.

AUT-1116 Automotive Engines (8-0-15-13)

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-1116A Automotive Engines: Theory and Construction (3-0-3-4)

A study of the theory and operation of an internal combustion engine and the component systems which comprise it.

AUT-1116B Engine Diagnosis and Service-Block Assembly (3-0-6-5)

Diagnosis and services procedures for locating and correcting engine problems which originate in the block assembly.

AUT-1116C Engine Diagnosis and Service-Head Assembly and Valve Gear (2-0-6-4)

A thorough study of the cylinder head assembly and valve gear including diagnostics, valve grinding, and guide and seat service.

AUT-1121 Braking Systems (3-0-6-5)

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-1121A Braking Systems - Fundamentals and Service (2-0-3-3)

Construction, types, diagnosis and service of both hydraulic and mechanical braking systems.

AUT-1121B Antilock Braking Systems (1-0-3-2)

Theory, components, diagnosing and servicing computerized antilock braking systems using specialized equipment.

AUT-1123 Chassis and Suspension Systems (5-0-9-8)

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-1123A Suspension and Steering Fundamentals and Service (2-0-3-3)

Types of function of suspensions, steering systems and the tools and techniques used to service them are covered in detail.

AUT-1123B Wheel Assembly Service and Balance (1-0-3-2)

Wheel construction, bearing and tire types are introduced. Servicing or replacement of wheel bearings and wheel balancing is emphasized.

AUT-1123C Wheel Alignment (2-0-3-3)

Steering geometry, prealignment inspection, and the various types of wheel alignments are covered in detail. Hands on experience using computerized four-wheel alignment equipment.

AUT-1124 Manual Transmissions and Power Trains (5-0-18-11)

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 trouble shooting maintenance and actual rebuilding and repairing the components is stressed in detail.

AUT-1124A Manual Transmissions and Drivelines - Construction and Theory of Operation (2-0-3-3)

A study of the various types of manual transmissions and design characteristics of both rear wheel and front wheel drive automobiles.

AUT-1124B Automobile Clutches - Operation and Service (1-0-6-3)

Purpose, types, diagnosis and service of the automobile clutch assembly used in both front wheel drive and rear wheel drive vehicles.

AUT-1124C Driving Axles and Driveline Service (1-0-3-2)

Constant velocity and single cardan universal joint inspection and service. Differential and final drive inspection, adjustment, and or component replacement using recommended factory procedures.

AUT-1124D Manual Transmissions and Transaxle Service (1-0-6-3)

Diagnosis disassembly inspection, and repair of both rear wheel drive manual transmissions and front wheel drive transaxles.

AUT-1126 Automotive Diagnosis and Tune-Up (5-0-9-8)

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-1126A Automotive Diagnosis (3-0-6-5)

A study of how to systematically and logically diagnose automotive problems and customer complaints using specialized tools and equipment.

AUT-1126B Automotive Engine Tune-Up (2-0-3-3)

Periodic adjustments, replacements and service of the automotive engine systems to restore and maintain good drivability, fuel economy and reduce emissions.

AUT-1127 Automatic Transmissions (8-0-18-14)

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 "trouble-shooting" procedures of various types of automatic transmissions.

AUT-1127A Automatic Transmissions and Transaxles - Construction and Operation (3-0-6-5)

History and development of the hydraulically operated automatic transmission. Planetary gear design and function, fluid couplings, torque convertors, and hydraulic control valving is covered in detail.

AUT-1127B Automatic Transmissions Service - Rear Wheel Drive (3-0-6-5)

Periodic maintenance, unit diagnosis, and major overhaul are all components of this course. Emphasis is especially heavy on the proper use of diagnostic and service tools and procedures.

AUT-1127C Automatic Transaxle Service (2-0-6-4)

Transaxle removal procedures, diagnosis, service and periodic maintenance of front wheel drive transaxles are covered in detail.

AUT-1128 Fuel Systems (5-0-15-10)

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-1128A Fuel Systems and Carburetor Fundamentals (2-0-6-4)

A thorough study of automobile fuels, fuel delivery systems and other principles of operation of the carburetor. Course includes carburetor diagnosis and service.

AUT-1128B Electronic Feedback Carburetion Systems (1-0-3-2)

A study of how electronics is applied to the operation of a carburetor to achieve optimum fuel economy and reduced exhaust emisson. Heavy emphasis is on system diagnosis and service.

AUT-1128C Electronic Fuel Injection-Throttle Body Type (1-0-3-2)

A study of the components which make up the throttle body electronic fuel injection system. System testing and service are major components of the course.

AUT 1128D Electronic Fuel Injection - Port Type (1-0-3-2)

Design, operation, diagnosis and service of a multiport electronic fuel injection system. The use of diagnosis test equipment is strongly emphasized.

AUT-1129 Electrical and Electronic Systems (7-0-15-12)

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-1129A Fundamentals of Electricity (3-0-6-5)

A study of the theory of electricity and how it is generated and utilized in an automobile. Ohm's law, circuit design, and the use of testing instruments are studied in detail.

AUT-1129B Automotive Electrical Systems (1-0-3-2)

Starting, charging, ignition, and basic lighting and accessory systems are covered in detail. Troubleshooting and service procedures constitute a major part of the course.

AUT-1129C Computerized Engine Controls (2-0-3-3)

A study of how electronic computerized components are utilized to control engine functions such as timing, fuel distribution, and emission controls. Use of computerized diagnostic equipment is heavily utilized.

AUT-1129D Computerized Accessory Systems (1-0-3-2)

A study of the application of electronic computer control of such accessory systems as electronic ride control, climate control, steering, anti-lock brakes, etc.

AUT-1208 Emission Controls (2-0-3-3)

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.

BGM-1001 Housekeeping Maintenance (5-0-9-8)

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 (5-0-9-8)

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 (1-0-6-3)

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 (1-0-6-3)

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-090 Basic Anatomy and Physiology (1-4-0-3)

This course covers the basic understanding of the shapes, structures, and functions of the human body and its parts.

BIO-100 Basic Biology (5-0-0-5)

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 (3-4-0-5)

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-104 Microbiology (3-2-0-4)

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-121 Anatomy and Physiology I (4-2-0-5)

A detailed study of cell biology will be followed by indepth coverage of epithelial, connective, muscular and nervous tissues. An understanding of this basic framework of human anatomy and physiology will allow investigation of the skeletal, muscular, and cardiovascular systems with discussion of fluid dynamics. Laboratories will give the student hands on exercises to facilitate development of the above mentioned topics. Prerequisites: Permission of instructor or advisor.

BIO-122 Anatomy and Physiology II (4-2-0-5)

It is recommended the student take Anatomy and Physiology II after successful completion of Anatomy and Physiology I. This course will begin with the nervous system and special senses and include indepth coverage of respiratory, digestive, urinary, endocrine,and reproductive systems. Laboratories on the above mentioned topics will facilitate the students' understanding of the subject matter. Prerequisite: BIO 121.

BIO-201 Botany (4-2-0-5)

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-206 Advanced Physiology (4-2-0-5)

This course offers an in depth study of the functional physiology of the human body with pathophysiological implications when appropriate. All major human body systems will be covered with laboratory exercises included to allow the student to see cause and effect and affect mechanisms which provide for homeostasis. Prerequisites: BIO 121, 122 or permission of the instructor.

BUS-101 Introduction to Business (5-0-0-5)

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 (1-4-0-3)

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 (1-4-0-3)

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 (1-4-0-3)

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-106 Shorthand I (3-2-0-4)

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, phrases and word beginnings and endings.

BUS-107 Shorthand II (3-2-0-4)

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 (3-2-0-4)

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 (1-2-0-2)

Designed to teach students how to use electronic calculators in solving the kinds of problems found in business. Prerequisite: MAT 100 or equivalent placement test scores.

BUS-113 Keyboarding (1-2-0-2)

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 (5-0-0-5)

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 (4-2-0-5)

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 (4-2-0-5)

Emphasis is placed on recording, summarizing, and interpreting data for management control rather than on skills. Applications and problems will focus on additional merchandising transactions and partnerships. Accounting services are shown as they contribute to the recognition and solution of management problems. A practice set will be completed in this course along with computer applications. Prerequisite: BUS 120.

BUS-122 Accounting III (4-2-0-5)

Emphasis is placed on corporations along with the study of long term liabilities, investments, analysis of financial statements, costs, cash flow statement, and budgets. The student will be introduced to cost accounting. Prerequisite: BUS 121.

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

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 (3-0-0-3)

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 (5-0-0-5)

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 (3-2-0-4)

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 good will, bad news, persuasive, orders, acknowledgements, application letters and data sheets. Prerequisite: ENG 102.

BUS-133 Governmental Accounting (3-2-0-4)

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 from the standpoint of both the private accountant and governmental accountant. Prerequisite: BUS 120.

BUS-141 Current Trends - Financial (3-0-0-3)

A course designed to develop the student's ability to keep up to date in his profession. Case studies and lectures centering around financial and business periodicals are the major teaching techniques used. Prerequisite: all course requirements of the first 3 quarters or advisor approval.

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

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 (3-0-0-3)

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 (3-0-0-3)

This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply his knowledge to his particular job. Historical treatment 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-202 Word Processing Systems I (1-4-0-3)

This course is designed to train students in the basic and intermediate functions of a text-editing/word processing system. Students learn to produce a variety of documents utilizing software, visual prompts, and diskette media. Prerequisite: Typing skill.

BUS-203 Word Processing Systems II (1-4-0-3)

This course is designed to train students in the advanced functions of a text-editing/word processing system. Prerequisite: BUS 202 on the same equipment and software.

BUS-205 Advanced Typing (1-4-0-3)

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, financial forms, prioritizing, and information gathering. Speed and accuracy requirements: 60 words per minute for five minutes; maximum of five errors. Prerequisite: BUS 104.

BUS-206 Dictation and Transcription I (3-2-0-4)

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Dictation rate of 80 words per minute required with resulting mailable transcripts. Prerequisite: BUS 108.

BUS-207 Dictation and Transcription II (3-2-0-4)

Covering materials appropriate to the course of study, students develop the accuracy, speed, and vocabulary that will enable them to meet the stenographic requirements of business and professional offices. Dictation rate of 100 words per minute required. Prerequisite: BUS 206.

BUS-208 Dictation and Transcription III (3-2-0-4)

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 (2-0-0-2)

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

BUS-214 Secretarial Procedures (3-2-0-4)

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 103.

BUS-221 Payroll Recordkeeping (2-2-0-3)

Emphasis on the methods of computing wages and salaries, the methods of keeping records, and the preparation of government reports. The student will perform manual and computerized payroll applications.

BUS-222 Intermediate Accounting I (3-2-0-4)

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 (3-2-0-4)

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 (3-2-0-4)

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. Cost accounting computer applications will be covered in this course. Prerequisite: BUS 122.

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

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 222.

BUS-229 Income Taxes I (3-2-0-4)

Application of federal and state tax laws to individual tax situations with special emphasis on current tax law changes. Computer applications will be used where they are applicable.

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

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, balance sheet accounts to sales, projected statements and cash budgets. Prerequisite: BUS 120.

BUS-231 Income Taxes II (3-2-0-4)

Application of federal and state tax laws to sole proprietorship, partnerships, S corporations, and corporations with special emphasis on current tax law changes as they apply to these forms of business. Special emphasis on practical experience. Computer applications will be used where they are applicable. Prerequisite: BUS 121 or advisor approval.

BUS-232 Sales Development (3-2-0-4)

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 (3-2-0-4)

A course designed to develop the student's ability to keep up to date in his profession. Case studies and lectures centering around financial 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-234 Current Trends in Office Administration (2-0-0-2)

A course designed to develop the student's ability to keep up to date in his profession. Case studies and lectures centering around financial and business periodicals are the major teaching techniques used. Prerequisite: all course requirements of the first three quarters or advisor approval.

BUS-237 Small Business Management (5-0-0-5)

Introduces the small business and its environment as a part of the overall business world. The creation and the management of a small business is 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 form of organization, franchising, obtaining capital, the management process, planning and tools for decision making, organizing, staffing, financial, and administrative control.

BUS-239 Marketing (5-0-0-5)

This course introduces the student to the field of marketing with emphasis on the functions of marketing as it relates to small businesses. The course will cover the marketing mix centering around the four P's of place, price, product, and promotion. Also, the student will cover advertising, sales promotion, and pricing strategies as they relate to the marketing function in large and small businesses.

BUS-244 Retail Management (5-0-0-5)

A study of the operations of a retail firm including merchandising, buying, selling, advertising, pricing policies and related functions such as financial management.

BUS-248 Business Economics I (5-0-0-5)

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 (5-0-0-5)

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 (3-0-0-3)

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 (3-0-0-3)

This course is designed to familiarize students with the functions of management, placing emphasis on the entire planning process. Areas to be covered will include quality control, strategic management, profit planning, and human resource management.

BUS-263 Statistical Quality Control (3-2-0-4)

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 (3-2-0-4)

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 (3-2-0-4)

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 (3-2-0-4)

Day-to-day plant direction, forecasting, product planning and control scheduling, dispatching, routing, and inventory control.

BUS-268 Plant Layout (3-2-0-4)

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 people, money and materials in a manufacturing operation.

BUS-270 Industrial Management (5-0-0-5)

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 (5-0-0-5)

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing effective work force and the role of the supervisor. Methods and principles of management are stressed.

BUS-273 Personnel Management (5-0-0-5)

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security.

BUS-275 Land Use and Development (3-0-0-3)

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, easement and zoning laws.

BUS-277 Credit and Collection (3-2-0-4)

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 (3-2-0-4)

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 (3-0-0-3)

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 (3-0-0-3)

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

BUS-283 International Banking (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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

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

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 (3-0-0-3)

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 (3-0-0-3)

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 (4-0-0-4)

The course consists of instruction in the areas of contracts, land 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 (3-0-0-3)

This course consists of instruction in the areas of financing arrangements, sources of financing, financing instruments, loans, mortgages, tax ramifications. 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 N.C. Salesman's License.

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

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 meetings 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 NC 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 NC Real Estate Brokers Examination.

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

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 and training, marketing operations, records and bookkeeping systems (including trust account bookkeeping) and financial operations. In order to satisfactorily complete this course, students must attend a minimum of 80% of the class meetings and achieve a passing grade under the College's uniform grading system for college credit courses. Prerequisite: BUS 291 or N.C. Salesman's License.

BUS-293 Credit Administration (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 questions.

BUS-297 Real Estate Seminar (3-0-0-3)

A seminar on the problems of real estate brokerage operations, basic business law, organizational form, financial problems, employer-employee relations, and other relations.

BUS-298 Real Estate Investments and Taxation (4-0-0-4)

An introductory 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 (3-0-0-3)

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 (2-0-6-4)

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 will be studied.

CAR-1012 Computers in Construction (1-0-3-2)

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 (5-0-15-10)

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-1101A Form Construction (1-0-3-2)

Form construction, erection, striping and concrete treatment.

CAR-1101B Methods of Construction (2-0-6-4)

Various materials and methods of building construction including masonry, concrete and wood.

CAR-1101C Site Preparation and Layout (2-0-6-4)

Preparation of site. Removal of rubble, trees and grading. Layout of building drainage and storm sewers. Construction of foundation footings and walls, and waterproofing.

CAR-1103 Carpentry: Framing (5-0-15-10)

A thorough introduction to the principles and practices of frame construction including sills, floor joists, sub-floor, wall framing, ceilings, rafters, bridging, sheathing, partitions, and roof construction. Coordination with other skills will be stressed.

CAR-1103A Floor Systems (1-0-3-2)

Floor systems including wood and metal will be studied. Conventional wood and steel trusses, beams and girders, sills and bridging will be emphasized.

CAR-1103B Wall and Ceiling Framing (2-0-6-4)

Wall and partition construction. Layout and framing for doors and windows and other openings.

CAR-1103C Roof Framing (2-0-6-4)

The course covers roof types and rafter layout for common, hip and valley rafters. Cornice construction will be discussed.

CAR-1104 Carpentry: Finishing (5-0-15-10)

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, built-ins. Emphasis will be on quality work.

CAR-1104A Stairways (1-0-3-2)

The course includes a study of codes for stairways. Layout and construction for varying types of stairs will be emphasized.

CAR-1104B Exterior Finishing (2-0-6-4)

Sidings, cornice and rakes will be covered. Roofing and ventilation are included.

CAR-1104C Interior Finishing (2-0-6-4)

Interior wall and ceiling and floor finishes. Door and window trim are included.

CAR-1106 Millwork and Cabinetmaking (5-0-15-10)

This course covers 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.

CAR-1106A Millwork (1-0-3-2)

The use of shop tools and the many methods and designs of millwork used in building construction and cabinetry are discussed.

CAR-1106B Base and Wall Cabinets (2-0-6-4)

Methods of designing base and wall cabinets using available space to determine door and drawer layout are covered.

CAR-1106C Vanities, Built-Ins and Arches (2-0-6-4)

The course covers layout and construction of vanities and built-in's. Emphasis is placed on the use of millwork in construction of arches and pass throughs.

CAT-101 Advertising Principles (3-0-0-3)

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 (1-0-6-3)

Problems in basic design, basic drawing techniques, relationships of materials and techniques to form. Emphasis on the creative process.

CAT-105 Basic Drawing (1-4-0-3)

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 (0-6-0-3)

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 (2-0-6-4)

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 (2-6-0-5)

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 (2-0-3-3)

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 (3-0-6-5)

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 (3-0-6-5)

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 (4-0-6-6)

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 (3-0-0-3)

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 (2-0-3-3)

Each student selects and pursues project work in the field of his choice. Maximum individual attention is available.

CAT-212 Industrial Art and Design (1-6-0-4)

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 (2-6-0-5)

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 (3-6-0-6)

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 (4-0-6-6)

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 discussion of assignments and solutions. Prerequisite: CAT 123.

CAT-226 Commercial Art and Advertising Design (Advanced) (4-0-6-6)

Course providing simulated professional working conditions. Advanced "job" problems. Emphasis on self-expression and originality. Students will complete their professional portfolios. Prerequisite: CAT 225.

CAT-231 Project Seminar II (2-0-3-3)

Students select and pursue project work in the field of their choice. Maximum individual attention is available.

CAT-232 Project Seminar III (1-0-6-3)

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 (4-0-0-4)

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 (3-2-0-4)

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 (5-0-0-5)

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 (3-0-4-5)

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 (3-0-4-5)

Continuation of Chemistry I; qualitative analysis, organic chemistry and environmental chemistry. Laboratory experience to accompany lecture. Prerequisite: CHM 101.

CHM-103 MLT Chemistry I (3-2-0-4)

This course is designed to give the student with little or no previous chemistry background an introduction to basic chemical principles. Specifically, the course will include atomic structure, chemical bonding and reactions, chemical equilibria, and phase characteristics (solids, liquids, and gases).

CHM-104 MLT Chemistry II (3-2-0-4)

A continuation of CHM 103 including introductory biochemistry and organic chemistry.

CIV-100 Boundary Control (5-0-0-5)

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 papabolic and spiral curve; geometric design of highways, highway surveys and plans including mass diagrams.

CIV-109 Surveying Law (4-0-0-4)

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 (4-0-0-4)

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 (4-0-0-4)

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 (2-0-6-4)

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 (3-0-3-4)

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 (2-0-6-4)

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 (3-0-0-3)

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 (2-0-0-2)

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 (3-2-0-4)

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 (2-0-3-3)

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 (2-0-3-3)

Introduction to the basic principles of hydraulics and hydrology necessary to the understanding of the disposal of 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 (2-0-3-3)

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 (2-0-3-3)

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 (1-0-3-2)

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 (5-0-0-5)

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 (5-0-0-5)

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 (5-0-0-5)

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 (1-4-0-3)

An introduction to the field of photography. A study of the fundamentals 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 (5-0-0-5)

The study 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 (5-0-0-5)

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 (0-0-20-2)

Provide supervised observation and participation in uniformed patrol duty, investigation, communication, records, corrections or 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 (3-0-0-3)

A study of the history and 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 (3-0-0-3)

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 (1-4-0-3)

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 (1-4-0-3)

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 (5-0-0-5)

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

CJC-202 Criminal Investigation (1-4-0-3)

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 (1-4-0-3)

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

CJC-204 Criminalistics (1-4-0-3)

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 (1-4-0-3)

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

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

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 (5-0-0-5)

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 (5-0-0-5)

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 (1-4-0-3)

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 interpretating 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 (5-0-0-5)

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 (1-4-0-3)

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 (3-0-0-3)

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 (1-4-0-3)

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 programing consideration.

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

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 (0-0-10-1)

COE-102 Cooperative Work Experience (0-0-20-2)

COE-103 Cooperative Work Experience (0-0-30-3)

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. Prerequisites: Approval of advisor and co-op coordinator.

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

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 (5-0-0-5)

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 (5-0-0-5)

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 (5-0-0-5)

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 (5-0-0-5)

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 (0-0-24-8)

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 (0-0-24-8)

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 (0-0-24-8)

Shop practice in hair shaping, professional ethics, manicuring, cosmetics and facials, hairstyling, cold waving, hair coloring and scalp treatment.

COS-1044 Clinical Applications (0-0-24-8)

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 (0-0-24-8)

A continuation of COS 1044.

COS-1511 Clinical Applications (0-0-15-5)

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 (0-0-15-5)

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 (0-0-15-5)

An introduction to the actual clinical practice covering bacteriology, pin curling, finger waving and hair rolling.

COS-1514 Clinical Applications (0-0-15-5)

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 (0-0-15-5)

Shop practice in professional ethics, manicuring, cosmetics and facials.

COS-1516 Clinical Applications (0-0-15-5)

Shop practice in hairstyling, cold waving, hair coloring and scalp treatment.

COS-1517 Clinical Applications (0-0-15-5)

Advanced shop techniques in hair coloring, lash and eyebrow tinting, and artistry in hairstyling wigs.

COS-1518 Clinical Applications (0-0-12-4)

Advanced shop techniques in cold waving, hair shaping, sterilization, sanitation, and chemistry.

COS-3004 Cosmetology Instructor Training (7-0-0-7)

A comprehensive approach to introducing the licensed cosmetologist to the requirements of the Cosmetology Instructor Training Program and the North Carolina State Board of Cosmetic Arts. The course content includes orientation, theories of education, unit planning, daily lesson planning, and clinic management and evaluation under the supervision of the licensed cosmetology instructor. Prerequisite: Be a licensed cosmetologist with six months of experience.

COS-3005 Cosmetology Instructor Training:
Practicum I (0-0-30-10)

This course will require in-depth applications of teaching theory in the actual practice teaching of cosmetology. Emphasis is on practical demonstrations and clinical management under the direct supervision of the licensed cosmetology instructor. Prerequisite: Be a licensed cosmetologist with six months of experience.

COS-3022 Cosmetology Instructor Training (7-0-0-7)

A continuation of Cosmetology Instructor Training, COS 3004, with emphasis on developing and conducting theory classes from prepared lesson plans; preparing and giving examinations; and giving practical demonstrations under the direct supervision of the licensed cosmetology instructor. Prerequisite: COS 3004 and COS 3005.

COS-3023 Cosmetology Instructor Training: Practicum II (0-0-30-10)

A continuation of Cosmetology Instructor Training COS 3004, COS 3005 and COS 3022. This course will require in-depth applications of teaching theory in the actual practice of teaching cosmetology, under the direct supervision of the licensed cosmetology instructor. Emphasis is on conducting theory classes from prepared lesson plans; preparing and giving examinations; and giving practical demonstrations. The cosmetology teacher trainee will compile a notebook of appropriate materials prepared by the trainer, e.g., lesson plans, examinations, and unit plans. Prerequisite: COS 3004 and COS 3005.

DAT-111 Introduction to Substance Abuse I (3-2-0-4)

This course is designed to introduce the student to the field of substance abuse. Areas of emphasis will be theories of addiction with major focus on the disease model of addiction, the "addictive personality," diagnostic criterion as defined in DSM III-R, signs and symptoms of abuse as well as the major classifications of psychoactive drugs and how they each effect the human body.

DAT-112 Introduction to Substance Abuse II (3-2-0-4)

A continuation of DAT 111 with particular focus on the major classifications of psychoactive drugs and their effect on the human body. Also included in this course is a lab experience which will allow the student to procure some first hand understanding of substance abuse via observation within an inpatient or outpatient treatment program. Prerequisite: DAT 111.

DAT-120 Interviewing and Counseling I (3-2-0-4)

This course is an introduction to family systems. A general overview of the basic principles of family systems will be presented. A major emphasis will be given to transgenerational (Bowenian) family theory. Prerequisite: DAT 112.

DAT-121 Interviewing and Counseling II (3-2-0-4)

The focus of this course is the development and refinement of therapeutic communication skills. Emphasis will be placed on the development of listening skills, developing perceptiveness to feelings, different levels of empathy, barriers to effective communication, appropriate and effective confrontation. Prerequisite: DAT 120.

DAT-122 Interviewing and Counseling III (3-2-0-4)

This course is a continuation of DAT 121 and will continue to focus on the development of therapeutic communication skills. Particular emphasis will be given to practical application and critiquing of these skills via video taping.

DAT-126 Crisis Intervention (3-2-0-4)

A study of the historical development and theoretical concepts affecting crisis intervention methodology. The course will also focus on assessment of crisis situations and effective interventions that can be utilized by the professionals and/or family members with individuals who are abusing substances. In addition, this course will include training in cardio-pulmonary resuscitation. Prerequisite: DAT 112 and DAT 120.

DAT-130 Human and Social Services (2-2-0-3)

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. Emphasis is placed on how these different resources play a vital role in the treatment, recovery and relapse prevention of the substance abuser. Prerequisite: DAT 112.

DAT-201 Techniques of Substance Abuse Education (3-2-0-4)

Techniques of designing, conducting and evaluating substance abuse education programs 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 or primary (not yet using substances); secondary (uses substances and may experience minor problems); and tertiary (abuses substances and experience problems). Prerequisite: DAT 122 and DAT 130.

DAT-205 Children, Adolescents and Substance Abuse (3-0-0-3)

The focus of this course is on the unique problems that children and adolescents experience as a result of their own substance abuse and/or that of their parents. Prerequisite: DAT 120 and PSY 203.

DAT-206 Recovery and Relapse Prevention (3-2-0-4)

The major focus of this course will be the development of those skills that provide healthy/functional alternatives to alcohol and other drug use/abuse thereby assisting the individual in maintenance of recovery and the prevention of relapse. Particular emphasis will be given to the area of relapse prevention. Prerequisite: DAT 210.

DAT-207 Adult Children and Co-Dependency (3-2-0-4)

This course focuses on the unique problems of individuals who grow up in dysfunctional families, particularly those where one or both parents were substance abusers. The issue of co-dependency will be a major concern. Prerequisite: DAT 210.

DAT-208 Support Groups (3-2-0-4)

A study of the Twelve Steps within the context of the various support groups that exist for the recovering community. This not only will include the different "anonymous" groups which are for the individual abuser, but also the support groups for family members such as Al-anon and Ala-teen. Prerequisite: DAT 111 and DAT 112.

DAT-210 Family Therapy of Substance Abuse (3-2-0-4)

This is a continuation of the introduction to family systems provided in DAT 120. The focus of this course will be on the exploration of family dynamics involved in substance abuse. Prerequisite: DAT 120.

DAT-212 Group Therapy (3-2-0-4)

This course is designed to introduce the student to the theory and dynamics of group therapy via an academic and experiential medium. Prerequisite: DAT 208 and DAT 210.

DAT-214 Ethics and Law (3-0-0-3)

A course designed to examine the ethical and legal issues within the substance abuse field. Prerequisite: DAT 210.

DAT-225 Substance Abuse Seminar (2-0-0-2)

This course taken in conjunction with clinical education is designed to provide each student with a support system where clinical experiences can be shared, problems discussed and possible solutions defined. Prerequisite: Completion of all other DAT curriculum course work.

DAT-230 Substance Abuse Clinical Education (0-0-30-10)

Students are required to complete a minimum of 300 hours applying clinical skills in an inpatient or outpatient substance abuse treatment service. This course provides the student with an opportunity to apply skills acquired throughout the curriculum. Prerequisite: Completion of all other DAT curriculum course work.

DFT-101 Technical Drafting I (0-0-6-2)

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 (0-0-6-2)

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 to 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 (4-4-0-6)

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 (2-0-6-4)

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 (0-0-3-1)

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 (1-2-0-2)

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 (1-2-0-2)

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 (1-2-0-2)

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 (2-2-0-3)

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 (1-0-3-2)

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 (3-0-0-3)

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-1122 Blueprint Reading and Sketching: Mechanical (1-0-3-2)

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, Shipbuilding, Plumbing, Heating and Ventilating systems.

DFT-1131 Drafting: Building Trades (1-0-3-2)

Selection and use of tools, lettering, geometric construction, orthographic projection, pictorial representation, sections and construction details.

DFT-1135 Design Techniques (CAD) (3-2-0-4)

An introduction and familiarization with the basic techniques of computer assisted drafting and computer aided manufacturing.

DVS-070 Basic Reading (1-4-0-3)

ECO-110 Contemporary Economic Institutions (5-0-0-5)

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 (2-0-0-2)

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 (0-2-0-1)

Course content varies as special interests of narrow scope are explored on an elementary level.

EDP-102 Computer Literacy for Beginners (1-2-0-2)

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 (3-2-0-4)

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 (1-2-0-2)

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 (2-2-0-3)

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 (3-2-0-4)

The student learns organization, storage, and retrieval techniques by utilizing spreadsheet and data management software packages. Prerequisites: EDP 102 or EDP 104.

EDP-108 Introduction to Programming (3-4-0-5)

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 (2-4-0-4)

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 (1-2-0-2)

An introduction to word processing on PC's and ways of using this tool to solve some of the clerical problems commonly encountered in small business.

EDP-114 Special Topics in Data Processing (3-2-0-4)

Course content varies according to student interest and needs.

EDP-115 Computer Graphics (3-2-0-4)

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 graphic packages; no programming experience required.

EDP-200 Operations Lab (0-4-0-2)

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: PASCAL II (3-2-0-4)

A continuation of EDP 211.

EDP-202 Assembly Language and Programming (3-4-0-5)

A study of addressing techniques, symbolic, coding, internal representation, and assembler systems. Prerequisite: One high level language course (EDP 110, 210, 211, or 214) or equivalent experience.

EDP-204 Computer Graphics Design (2-4-0-4)

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 (1-4-0-3)

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 120 or equivalent experience.

EDP-206 Operating Systems (3-2-0-4)

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-207 Individual Programming Project: Novelle (3-2-0-4)

A study of the Novelle networking system.

EDP-208 RPG II (2-4-0-4)

A problem oriented approach to programming with a high level fixed logic business language.

EDP-209 Individual Programming Project: C Language Programming (3-2-0-4)

Introduction to C Language Programming.

EDP-210 FORTRAN Programming (2-4-0-4)

Introduces the student to computer programming logic and symbolic language. Emphasis on flowcharting and program construction.

EDP-211 PASCAL (3-4-0-5)

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 (3-0-0-3)

The student will research topics of current interest in the field. Prerequisite: EDP 206 and EDP 218.

EDP-214 COBOL Programming (3-4-0-5)

Structured programming in this common business language.

EDP-216 Integrated Applications Development I (2-4-0-4)

The student will use spreadsheets, databases, and other development tools to develop a small business system in detail.

EDP-218 Database Programming (3-0-0-3)

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 (5-0-0-5)

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 (2-4-0-4)

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 (1-4-0-3)

A continuation of EDP 216. Prerequisite: EDP 216 or by permission of the instructor.

EDT-101 Orientation to Electroneurodiagnostics (1-0-0-1)

A general orientation to the hospital setting, in particular to departments that perform electroneurodiagnostic testing. The student is introduced to the topics of patient monitoring, infection control and confidentiality.

EDT-102 Management of Medical Emergencies (2-2-0-3)

The student will be instructed in cardiopulmonary resuscitation, management of seizures, and other techniques for the treatment of common emergencies encountered in an EEG laboratory or during bedside recordings.

EDT-107 Laboratory Management (1-0-0-1)

A course designed to provide students with the basic management techniques, including techniques of scheduling, recordkeeping, and record storage.

EDT-113 Neuroscience (3-0-0-3)

This course provides the building blocks of the central nervous system, neurons, structural and functional units. Outline of those features of neurophysiology that are of concern to the electroneurodiagnostic technologists.

EDT-114 Instrumentation and Recording Methods (4-2-0-5)

Theory and practice of 10-20 international system of electrode placement, electrode metals and electrode application, electrode and circuit impedances, instrument controls, activation procedures and recognition of normal and abnormal activity and localization procedures, understanding and employing optimal utilization of EEG/EP equipment. Labs are designed in an on-campus laboratory to apply theoretical knowledge and skills.

EDT-115 Clinical Medicine (3-0-0-3)

A course designed to provide the student with a basic knowledge of the types of diseases most often seen in patients referred to an electroneurodiagnostic laboratory and will be able to obtain an abstract of the patient's history and formulate the recording strategy and to anticipate the findings of the diagnostic tests.

EDT-116 Clinical Correlations (3-2-0-4)

Correlation of material covered in EDT 115 and EEG findings in those disorders. Teaching records from the files of affiliate laboratories are used to illustrate normal and abnormal records. Artifacts and extenuating circumstances seen are identified and discussed.

EDT-117 Special Procedures (2-0-0-2)

This course is designed to provide a basic understanding of special testing procedures utilized in neurological diagnosis.

EDT-118 Laboratory Practice (2-12-0-8)

This course is designed to provide practice in application of theories covered in earlier EDT courses, using mock situations.

EDT-120 Clinical Experience (0-0-27-9)

This course will provide clinical experience in hospital settings on a one to one basis with registered technologist supervision. A constant attempt will be made to correlate findings with the clinical problems presented by patients.

EDU-100 Reading Assistant (4-0-0-4)

Study of the role of the reading assistant working in conjunction with the elementary school teacher. Emphasis upon instructional skills, materials, and records used. Students should gain a knowledge of reading readiness and word recognition skills and activities. Prerequisite: EDU 104.

EDU-101 Child Growth and Development I (5-0-0-5)

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-102 Study Skills (2-0-0-2)

The study skills course is designed to promote academic confidence and responsibility by teaching students to maximize their potential. The course will emphasize study skills and habits, organization, time management, resources, planning and prioritizing. By emphasizing the importance of total academic planning and preparedness, the course will help students become aware of their part in academic success. The course will use pre and post tests to evaluate outcomes. The major goal is a better student.

EDU-103 Working with Young Children (4-6-0-7)

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 knowledge of how to adapt learning to the needs of individual children.

EDU-104 Introducing Reading (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (2-2-0-3)

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 (2-2-0-3)

A continuation of EDU 112.

EDU-114 Safety in the School Shop and Laboratory (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 accommodation of the handicapped student in a regular classroom setting.

EDU-125 Drafting for the Vocational Instructor II (3-0-0-3)

An extension and broadening of the techniques used in EDU 121.

EDU-131 Child Growth and Development II (5-0-0-5)

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 (3-2-0-4)

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 (4-0-0-4)

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 (5-0-0-5)

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 (3-0-0-3)

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 (5-0-0-5)

Seminar on practicum experiences and discussions on issues such as discipline, professionalism, and federal rules and regulations for daycare centers.

EDU-201 Activities for Young Children (5-6-0-8)

Individual and group exploration of activities and media for promoting optimal overall development of children. Special emphasis is placed on music, art, science, and oral language development. Laboratory experiences provide opportunities to plan and implement a program which demonstrates adaptability of specified activities and media to a variety of age levels. Prerequisite: EDU 103.

EDU-203 The Exceptional Child (3-0-0-3)

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. Prerequisite: EDU 201.

EDU-204 Parent Education (3-0-0-3)

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 the 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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

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 (3-2-0-4)

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 (0-0-3-1)

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 (2-0-0-2)

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 (2-0-0-2)

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 (2-0-0-2)

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 (3-0-6-5)

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 (4-0-6-6)

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 (2-0-0-2)

Principles of heat transfer; description of heat loss; survey of materials to decrease heat loss; heat load calculations.

EGY-106 Passive Design (5-0-0-5)

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 (4-0-6-6)

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 (1-2-0-2)

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 (3-0-6-5)

Installation of collectors and other solar components; connecting pipes and ducts; checking out the systems; provisions for future maintenance; routine maintenance; troubleshooting and repairs. Prerequisite: EGY 107.

EGY-203 Design of Alternate Energy Systems (2-2-0-3)

General design procedure; evaluation of input requirements and design options; exercises in design of solar energy systems for hypothetical clients; development of design portfolio. Prerequisites: EGY 106, EGY 107, and EGY 205.

EGY-205 Photovoltaic Systems (3-2-0-4)

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 (2-0-0-2)

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 (2-0-0-2)

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 (2-2-0-3)

Application of control methods to particular examples of alternate energy systems. Prerequisite: AHR 201.

EGY-210 Energy Project Lab I (2-4-0-4)

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 (2-0-6-4)

Continuation of EGY 210 with emphasis on design of alternate energy systems; construction projects; individual research. Prerequisite: EGY 203.

EGY-1115 Solar Energy (12-6-0-15)

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 (1-4-0-3)

The basic concepts of solar energy as applied to basic plumbing and heating.

EGY-1125 Solar Domestic Hot Water (4-4-0-6)

Types, components, operation, freeze protection, sizing, and installation of solar domestic hot water systems.

EGY-1130 Passive Solar I (5-0-0-5)

The student learns the basics of designing with climatic to minimize mechanical heating and cooling requirements.

EGY-1131 Passive Solar II (6-0-0-6)

A continuation of Solar I. Studies will review passive solar design house plans in this area.

EGY-1142 Active Solar Space Conditioning (5-4-0-7)

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 (1-4-0-3)

Individual projects will apply knowledge gained in previous course; experience in system construction development of basic masonry and carpentry skills.

EGY-1155 Work Experience (0-0-20-2)

The student will be employed in a project or business using the concepts of solar energy.

EGY-1156 Professional Seminar (5-0-0-5)

Discussion of special topics in the field of solar energy.

ELC-109 Fundamentals of AC and DC (3-2-0-4)

This course is a survey of electronics technology from the discovery of electrical phenomena through modern communication and computer systems. The associated laboratory activities will emphasize the use of basic test instruments to verify the concepts presented in lecture.

ELC-1108 Residential Wiring (7-0-6-9)

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 (1-0-3-2)

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) (7-0-6-9)

A study of Ohm's Law and resistive circuits is covered. Skills are developed in the theory and use of inductors and capacitors along with the application of VOM.

ELC-1113 AC - DC Machines (7-0-6-9)

This course provides fundamental concepts in single and polyphase 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 (7-0-6-9)

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 (4-0-6-6)

Industrial electronic systems such as motor controls, alarm systems and controls, magnetic amplifier controls, and other basic solid-state types of systems commonly found in most industries are studied.

ELC-1119 Programmable Controllers (4-0-6-6)

Advanced control circuits are discussed. Programmable control devices are covered.

ELC-1123 Electrical and Control Systems (1-2-0-2)

Fundamentals of DC and AC circuits; familiarzation with residential power wiring; sensors and controllers used in heating systems.

ELC-1125 Electrical Troubleshooting (2-0-3-3)

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 (5-0-9-8)

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 (2-0-3-3)

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 (5-4-0-7)

This course will provide a brief overview of electronics technology and of the careers available to the technician. The course will concentrate on basic concepts of direct 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 (5-4-0-7)

This course 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 (5-4-0-7)

This course will start with an examination of vacuum tube operation and follow the development of solid state semiconductor devices from the 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 biopolar, unijunction and field effect transistor families. The SCR and other common thyristors are also examined.

ELN-109 Digital Logic Circuits I (3-2-0-4)

This course will examine the fundamentals of digital electronics. Topics include logic gates and counting circuits, flip-flops, timers, displays, and registers. Prerequisites: ELN 201 and MAT 119.

ELN-110 Basic Troubleshooting (3-2-0-4)

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-130 Converter Fundamentals and Design (3-2-0-4)

This course examines the theory of RF converter systems. Major topics are mixers, oscillators, and wideband amplifiers. Laboratory test procedures are emphasized.

ELN-131 Converter Analysis (3-2-0-4)

A continuation of ELN 130.

ELN-132 Test Instruments (1-0-3-2)

This course emphasizes the proper use of test and calibration equipment. A logical approach to electronic equipment troubleshooting is stressed.

ELN-133 Communication Circuits (3-2-0-4)

This course surveys the basic theory and application of AF and RF amplifiers. Various transmitter and receiver stages are explored.

ELN-201 Electronic Circuits (5-4-0-7)

This course 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 the lectures.

ELN-202 Linear Circuits (1-4-0-3)

This course will focus on the characteristics of commonly used linear IC's and OP amps. Applications in consumer electronics and industrial instrumentation will be covered. Laboratory activities will verify electronic characteristics of specific devices.

ELN-204 Electronic Communications (5-4-0-7)

This course will examine IF and RF amplifiers, oscillators and modulation techniques. Specifically: AM, FM, PM, and SSB principles and applications will be studied. Laboratory activities will stress the application of communications theory to practical circuitry using communication test instruments. Prerequisites: ELN 201 and MAT 117.

ELN-205 Computer Repair (2-4-0-4)

This course will examine the internal operation of micro and minicomputers. System layouts and designs will be studied. The course will emphasize the interconnection of memory circuits, timing circuits, the central processing unit, and input/output devices. The interfacing of external devices, ports, and buses will be studied along with analysis of signal paths and logic states. Various troubleshooting techniques will be explored.

ELN-207 Advanced Electronics (5-4-0-7)

This course will examine microwave radio equipment, radar, and other special communications circuits. Emphasis is placed on microwave and special purpose antennas along with waveguide and other high frequency transmission media. Applications of klystrons, magnetrons, and TWT's are covered. Prerequisite: ELN 204.

ELN-209 Digital Logic Circuits II (3-2-0-4)

This course is a continuation of Digital Logic Circuits I, and will examine various logic circuits including; gates, adder circuits, shift registers, memory, and timing circuits. An introduction to microprocessors will be explored. Laboratory activities will stress application of digital logic theory. Prerequisite: ELN 109.

ELN-210 TV Systems Analysis (5-4-0-7)

This course introduces the theory of basic TV broadcasting and reception circuitry. The emphasis of this course is on the theory of operation of the black and white television receiver. Laboratory activities will stress the proper use of electronic test equipment to examine circuit operation.

ELN-217 Industrial Electronics and Controls (5-4-0-7)

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, relay and sensing devices, and industrial DC motors. The concept of open and closed loop feedback will be stressed. Emphasis will be on electronic devices and the low power aspects of industrial control circuitry.

ELN-220 Antenna Design (3-2-0-4)

This course involves the study of single and complex antennas, materials, physical dimensions, design formula, skin effect, gain, radiation patterns, sine loss, standing wave radio, reflected power, and various methods of field strength evaluation. An antenna construction project is required for this course.

ELN-221 Two-Way Radio Systems (3-2-0-4)

This course is a detailed examination of two-way radio circuitry as used in commercial applications. A review of applicable FCC rules and regulations will also be presented.

ELN-222 Special Project Building I (0-4-0-2)

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 (0-4-0-2)

A continuation of ELN 222.

ELN-224 Electronic Layout and Design (0-0-3-1)

This course 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 development, 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 (2-0-6-4)

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. Students will be expected to demonstrate the alignment of a communications transceiver.

ELN-234 Electronic Fabrication (0-0-3-1)

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 (3-0-3-4)

This course 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 (3-0-3-4)

This course will focus on microprocessor architecture, internal registers, and internal bus structures. Major topics are machine language programming, use of operation codes to move data internally and the study of how memory sequentially stores and supplies the program for performing computer operations.

ELN-237 Microprocessor Interfacing (3-0-3-4)

This course focuses on the timing and control signals, and sequential operations for performing instructions necessary to interface to the PC. Emphasis is placed on the use and analysis of the microprocessors (CPU) with arithmetic and control units on one chip. Interfacing to transducers, ADC, and DAC will also be examined.

ELN-238 Microcontroller Design (3-0-3-4)

This course is an analysis of the timing and control signals necessary to interface the central processing unit to peripheral equipment. Major topics include data transformation 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 (3-2-0-4)

This course is a detailed study of the computer system as a unit. Topics studied include system architecture, interfacing peripherals to the CPU, 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 emphasis on the PC. The fundamentals of Local Area Networks will be examined.

ELN-240 Advanced Microprocessor Design (3-0-3-4)

This course will examine basic registers, counters, the arithmetic logic unit, serial and parallel systems, and the timing and control unit. Principles of storage, memory and address registers, memory selection techniques and machine language programming will also be explored.

ENG-010 Reading (1-4-0-3)

Encourages the student's development of vocabulary, study skills, and reading comprehension. The course emphasizes the grasp of basic ideas and offers workable techniques which the student may use in reading assignments.

ENG-011 Basic Grammar (1-4-0-3)

An intensive study of grammar for students preparing for college writing courses.

ENG-080 Developmental English (1-4-0-3)

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-101 Language and Composition I (5-0-0-5)

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 (5-0-0-5)

Teaches the student to write clearly and effectively. This course is a continuation and further development of English 101 with the emphasis on developing the longer composition. Library research is introduced. Prerequisite: ENG 101.

ENG-103 Report Writing (3-0-0-3)

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.

ENG-110 Freshman Composition I (5-0-0-5)

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 (5-0-0-5)

Introduction to the research paper and the study of literature with emphasis on methods of research and documentation. Development of skill in literary analysis. Prerequisite: ENG 110.

ENG-204 Oral Communications (3-0-0-3)

A study of basic concepts and principles of oral communications to enable the student to communicate well 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 (5-0-0-5)

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, and Romanticism.

ENG-212 American Literature II (5-0-0-5)

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, Regionalism and Existentialism.

ENG-220 English Literature (5-0-0-5)

A survey of English literature, beginning with *Beowulf* and concluding with William Blake's poetry.

ENG-222 Theatre Activities I (0-0-6-2)

Provides laboratory coursework in all phases of theatre production.

ENG-223 Theatre Activities II (0-0-6-2)

A continuation of ENG 222.

ENG-224 Theatre Activities III (0-0-6-2)

A continuation of ENG 223.

ENG-1106 Fundamentals of English (3-0-0-3)

Designed to aid the student in the improvement of self-expression in grammar, composition, and reading skills.

ENG-1111 Reading Comprehension (2-0-0-2)

Designed to develop the student's reading comprehension directly related to specifications, code books and installation manuals for building and/or construction.

ENG-1112 Communication Skills (2-0-0-2)

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 (0-0-20-2)

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 (3-4-0-5)

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 (3-4-0-5)

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 (3-2-0-4)

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 (3-2-0-4)

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 (3-2-0-4)

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 (3-4-0-5)

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 (3-2-0-4)

The influence of environmental conditions of 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 (1-6-0-4)

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 Meteorology (3-4-0-5)

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 forcasting accompany lectures.

ENV-230 Environmental Quality, Laws and Enforcement (3-0-0-3)

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 (1-0-12-5)

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 (4-0-0-4)

Covers the nature of the business enterprises, 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 (4-0-0-4)

Examines the dynamics, language and coordinations of fashion and analysis, of the basic styles, sizes, construction, and workmanship of apparel products.

FAS-104 Fashion Accessories (4-0-0-4)

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 (4-0-0-4)

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-116 Fashion Sketching (2-2-0-3)

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 (3-2-0-4)

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-210 Fabric Science II (4-0-0-4)

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 (1-0-0-1)

This course would emphasize wardrobe planning and coordination, included in: personal color analysis, developing a professional clothing style appropriate for each individual and occasion. Also, coordinating wardrobe and cosmetics.

FAS-216 Fashion Sales Promotion I (4-0-0-4)

An introduction to sales promotion activities for all marketing levels with concentration on the specialized techniques and procedures employed to implement the activities of advertising and copywriting.

FAS-217 Fashion Sales Promotion II (4-0-0-4)

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-218 Computer Applications/Merchandising (3-2-0-4)

The student will utilize spreadsheet and data management software packages for projects involving analysis of marketing data, unit control and dollar control. Prerquisite: All course requirements of the first three quarters or approval of the curriculum advisor.

FAS-219 Current Trends/Marketing (4-0-0-4)

A course designed to develop the student's ability to keep up to date in his/her profession. Case studies and research from business and fashion merchandising periodicals are the major teaching techniques used. Prerequisite: All course requirements of the first three quarters or approval of the curriculum advisor.

FAS-222 History and Psychology of Dress (3-0-0-3)

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 (3-0-0-3)

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.

FRE-101 Beginning French (5-0-0-5)

This beginning course stresses basic language skills such as listening, speaking, reading, and writing in French. Aspects of French culture are also introduced.

FRE-110 Elementary French I (5-0-0-5)

This course stresses the continuing development of basic French language skills and the study of French culture.

FRE-120 Elementary French II (5-0-0-5)

This course further develops basic French language skills and continues the study of French culture. It includes extensive readings and a grammar review. Spoken and written expression are emphasized.

FSO-101 Orientation to Food Service (3-0-0-3)

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 (2-8-0-6)

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 (3-0-0-3)

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 (2-2-0-3)

A study of standard sanitation and safety practices to prevent health hazards and avoid injuries.

FSO-105 Introduction to Garde Manger (1-0-3-2)

This is an introduction to basic cold food preparation including appetizers, cold sauces, salads and vegetable carvings.

FSO-106 Dining Room Procedures (1-0-3-2)

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 (2-0-6-4)

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 (3-0-0-3)

A study of production system. The establishment of objectives, guidelines, and policies is stressed as well as effective personnel management.

FSO-112 Food Preparation II (2-8-0-6)

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 (5-0-0-5)

Offers the student an introduction into nutrition as well as menu writing basics.

FSO-117 Baking II (2-0-6-4)

Emphasis is placed on dessert preparations. Students prepare pies and cakes for service in the College Dining Room.

FSO-122 Food Preparation III (2-8-0-6)

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 (3-0-0-3)

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 (2-8-0-6)

A study of the cooking process in relation to nutrition, organic chemistry, and thermodynamics. In addition, students prepare meals for serving in the College Dining Room.

FSO-204 Food Purchasing and Cost Control (5-0-0-5)

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 food service industry.

FSO-207 Food Merchandising (4-2-0-5)

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.

FS0-212 Food Preparation V (3-6-0-6)

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 (2-0-3-3)

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 (5-2-0-6)

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, and employment in long-term care.

GCS-1111 Geriatric Nursing Skills (4-4-0-6)

A continuation of GCS 1110. Basic health care skills and knowledge of the body systems and system-related age changes will be studied.

GCS-1112 Geriatric Nursing Clinical (0-0-18-6)

Practical applications in a clinical setting of functions taught in GCS 1110 and GCS 1111.

GEO-102 Cultural Geography (5-0-0-5)

Interrelations of man, earth and culture; the geography of race, language, religion; political and economic patterns; populations growth and movements.

HHA-1001 Home Health (8-8-12-16)

An introduction and study of the role and function of the home health aid. 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, and long-term care. This course will also have a clinical component allowing practical application of skills.

HIS-101 World Civilization I (5-0-0-5)

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-102 World Civilization II (5-0-0-5)

To continue to trace the development of Europe and the western world. This course will begin chronologically at the flowering of Islam and follow through the expansion of the 18th century. Students will survey the evolution of social institutions and diffusion of cultural items throughout Europe.

HIS-103 World Civilization III (5-0-0-5)

This course will continue western man's social, political, economic and intellectual development from the sixteenth century to modern Europe. Included in this survey is the age of Enlightment, the Industrial Revolution, and the development of modern European states.

HIS-104 Cherokee History I (5-0-0-5)

This course is designed to introduce the student to the rich history and culture of the Cherokee people. Subjects include their origin, culture, belief system and events surrounding contact with Europeans. Also considered will be changes in their traditional social and political structures. Time periods: Prehistory - 1800.

HIS-105 Cherokee History II (5-0-0-5)

This course will survey the Cherokee transformation in society and culture prior to and after removal through contemporary problems and changes that face the Eastern Band of the Cherokee. Time period: 1800 - 1990.

HIS-211 United States History I (5-0-0-5)

Emphasis will be upon the backgrounds of discovery, settlement, constitutional development and union. Manifest destiny and the developing sectionalism up to the end of the Civil War.

HIS-212 United States History II (5-0-0-5)

The continuing study of the development of the United States will cover the reconstruction, imperialistic tendencies, the progressive movement, World War I and World War II, Korean, Vietnam, and significant issues to the present. Prerequisite: HIS 211 or permission of instructor.

HPT-101 Introduction to Hospitality (3-0-0-3)

This course will deal with the history of the hospitality industry. The student will learn the major components of the industry that encompass many separate businesses. In addition, students will study industry trends and predictions.

HPT-102 Guest and Customer Relations (3-0-0-3)

The study of basic human relations skills necessary for guest satisfaction. The student will learn proper telephone skills as well as the importance of positive nonverbal communication. Particular emphasis will be placed on dealing with customer problems and complaints.

HPT-103 Tourism and the Local Community (5-0-0-5)

A seminar course that will feature representatives from local businesses and travel related agencies. Students will learn what services are provided, with particular emphasis on unique events and activities.

HPT-104 Lodging Operations (3-0-0-3)

An introduction to the organization and management of hotels and motels. Students will learn procedures for making reservations, guest registration, check-in and check-out, and accounting for all on-premise guests.

HPT-105 The Economics of Travel and Tourism (5-0-0-5)

A study of how travel and tourism affects the local economy. The student will learn the "multiplier effect" and how income is expanded throughout the business community. Students will realize how tourism increases state and local income through increased sales and tax collection.

HPT-106 Hospitality Marketing and Promotion (3-0-0-3)

Reasons why people travel will be studied in relation to what makes them choose particular destinations. In addition, the link between tourism, travel and recreation will be explored. By learning the process by which tourists decide to travel, methods of influencing that process will be studied. Students will learn how to develop a marketing plan and appropriate ways to reach a target market.

HPT-107 Park and Campground Management (3-0-0-3)

Services provided by private, state, and federal campgrounds and parks will be studied. Trends in recreation will also be studied in relation to park and campground services. Problems with rising maintenance costs, upkeep, and increased usage will be addressed.

HPT-108 Hospitality Law (5-0-0-5)

Students will learn how to prevent law suits and losses by understanding the legal responsibilities of those dealing with the general public. Students will gain an awareness of the tremendous scope of responsibility that the law places upon lodging and recreational facilities. Specific cases will be studied for discussion.

HPT-109 Travel Management (2-6-0-5)

The organization and services provided by travel agencies will be studied. In addition, students will learn the job responsibilities of a travel agent. Laboratory exercises will provide exposure and an observation of activities associated with local travel agencies.

ISC-1101 Industrial Safety (3-2-0-4)

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 (3-0-0-3)

This course 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 (3-2-0-4)

Methods of legal research, proper citation of authority, acquaintance with legal treaties, text, and reporter, shephardizing cases.

LEX-106 Constitutional Law (5-0-0-5)

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 (4-2-0-5)

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 nontestimonial identification.

LEX-110 Civil Procedure (3-4-0-5)

Introduction to basics of civil litigation; N.C. Courts, venue, and jurisdiction. In-depth study of Rules of Civil Procedure of North Carolina. The student will be taught to draft and file various legal documents including pleadings, motions, subpeonas, and discovery devices.

LEX-111 Torts (5-0-0-5)

Civil wrongs or violations of private rights. Emphasis on more common forms of negligence actions and their legal elements.

LEX-112 Supervised Work Experience (0-0-20-2)

Student will be placed in a work situation related to the paralegal field.

LEX-113 Family Law (4-2-0-5)

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-201 N.C. Legal Systems (3-2-0-4)

This course deals specifically with specific types of legal processes used in the N.C. court system.

LEX-203 Administrative Law (3-0-0-3)

A study of the substantive law, procedures, and forms involved in practice before administrative agencies including worker's compensation, social security, and employment security.

LEX-208 Criminal Law (5-0-0-5)

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 (3-2-0-4)

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 (3-2-0-4)

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 record and summaries thereof will be included. Various typical problems and errors which may render a title unmarketable will be included.

LEX-212 Real Property (5-0-0-5)

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 (3-0-0-3)

This course includes the study of the organization of a law office, office forms and legal forms, filing equipment and system, 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 (3-2-0-4)

Advanced research into particular points of law together with the writing of briefs and presentation of various materials.

LEX-232 Estate Administration (3-2-0-4)

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, preparation of interim and final accounting and preparation of refunding bonds and releases.

MAS-1000 Masonry Shop I (5-0-15-10)

The course emphasized in 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 are covered.

MAS-1000A Masonry-Mortar Mixing Techniques (1-0-3-2)

Emphasis is placed on the study of the different types of mortar and how they are mixed using the proper amounts of sand, lime, and cement.

MAS-1000B General Masonry Procedures (2-0-6-4)

The course consists of the use and care of masonry tools and equipment and how different types of masonry products are used in construction.

MAS-1000C Masonry-Laying to Line (2-0-6-4)

The course is a study of the proper procedures for aligning bricks and blocks both horizontally and vertically in the shortest amount of time.

MAS-1001 Masonry Shop II (5-0-15-10)

Emphasis is placed on the development of fundamental skills, bond layout, projects with various types of masonry units, fireplaces, ornamental work, recent developments in the masonry field.

MAS-1001A Masonry - Fundamental Skill Development and Bond Layout (1-0-3-2)

A study of the different ways to lay various types of masonry materials to create different designs is included.

MAS-1001B Fireplace Construction (2-0-6-4)

Different types of fireplaces, their components and function, and construction procedures are discussed.

MAS-1001C Ornamental Masonry Techniques (2-0-6-4)

The course consists of a study of how to create ornamental masonry projects by utilizing various bond layouts to create various designs.

MAS-1005 Rock Construction (5-0-15-10)

The course consists of a thorough study of rock construction and the unique techniques and tools required for quality work.

MAS-1005A Stick-On Stone Construction (1-0-3-2)

Proper mortar mixing techniques and application to achieve correct bond patter for stick-on stone will be studied.

MAS-1005B Field Stone Construction (2-0-6-4)

Selection, sizing, proper mortar mixing and application to achieve well designed and study field stone construction is emphasized.

MAS-1005C Sized Stone Construction (2-0-6-4)

Proper procedures utilized to create various types of bonds or patterns using sized stone masonry products are emphasized.

MAS-1010 Beginning Masonry (2-0-3-3)

Basic techniques of masonry repairs are discussed.

MAS-1020 Related Trowel Trades (5-0-15-10)

The student will develop the basic understanding of trowel trades and the 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 will be discussed.

MAS-1020A Fundamentals of Stucco (1-0-3-2)

The course is a study of how to mix various types of stucco, designs, and application techniques.

MAS-1020B Assimilated Brickwork (2-0-6-4)

Color mixing, layout and application of material to create assimilated brickwork will be studied.

MAS-1020C Assimilated Rockwork (2-0-6-4)

The course continues with the process of color mixing, layout, and application of materials to create assimilated rockwork.

MAT-081 Developmental Math (1-4-0-3)

A self-paced individualized mathematics course emphasizing whole numbers, fractions, and decimals.

MAT-084 Vocational Math (0-4-0-2)

A basic course in general mathematics covering measurement, fractions, decimals, and other mathematical usages found in the building trades.

MAT-100 Basic Math (5-0-0-5)

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 equation.

MAT-103 Foundation Skills for Algebra (5-0-0-5)

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 (3-0-0-3)

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 (5-0-0-5)

Fundamental concepts of algebra: real numbers, exponents, scientific notation, the metric system, polynomials, linear equations and graphs, factoring, algebraic fractions, quadratics. Prerequisite: MAT 103 or equivalent.

MAT-108 College Algebra (5-0-0-5)

Advanced algebra topics: functions, factoring, algebraic fractions, roots and radicals, linear and quadratic equations and inequalities and their graphs, solving linear equation. Prerequisite: MAT 105 or equivalent.

MAT-110 Business Math (5-0-0-5)

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 (5-0-0-5)

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 Mathematics (5-0-0-5)

A basic course encompassing all operations of fractions, decimals, the metric system and an algebraic formulae.

MAT-113 Geometry (5-0-0-5)

A study of the fundamental geometry concepts to enable the student to better understand algebra, trigonometry, and shapes, planes, and angles.

MAT-115 Electrical Math I (5-0-0-5)

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, and linear equations.

MAT-116 Electrical Math II (5-0-0-5)

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.

MAT-117 Electrical Math III (5-0-0-5)

Intermediate algebra topics: functions, graphs, factoring, algebraic fractions, fractional equations, quadratics, simultaneous equations. Prerequisite: MAT 115 or equivalent.

MAT-119 Mathematics of Computer Systems (3-0-0-3)

Topics which provide the basis of digital computer architecture: binary and hexadecimal arithmetic, logic gates, Boolean algebra.

MAT-135 Copyfitting Math (3-0-0-3)

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-1101 Fundamentals of Math (5-0-0-5)

Practical number theory. Analysis of basic operation: addition, subtraction, multiplication and division. Fractions, decimals, power and roots, percentages, ratio and proportion. Plan 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 (3-0-0-3)

Estimating quantities of material and labor costs for installation of plumbing systems in residential and commercial buildings.

MAT-1109 Estimating: Building Trades (4-0-0-4)

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 (2-0-0-2)

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 (4-0-0-4)

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 (4-0-0-4)

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 (3-0-0-3)

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; and introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

MAT-1118 Estimating: Electrical (2-0-0-2)

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 (3-0-0-3)

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 (3-0-0-3)

Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution of oblique triangles using law of cosines; graphs of the trigonometric functions; inverse functions; and trigonometric equations. All topics are applied to practical problems. Prerequisite: MAT 1101.

MAT-1124 Machinist Mathematics III (3-0-0-3)

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 (1-0-6-3)

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-1101 Machine Shop Theory and Practice I (2-0-6-4)

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 (2-0-6-4)

A continuation of MEC-1101.

MEC-1103 Machine Shop Theory and Practice III (2-0-6-4)

A continuation of MEC-1102.

MEC-1104 Machine Shop Theory and Practice IV (2-0-6-4)

A continuation of MEC-1103.

MEC-1105 Machine Shop Theory and Practice V (2-0-6-4)

A continuation of MEC-1104.

MEC-1106 Machine Shop Theory and Practice VI (2-0-6-4)

A continuation of MEC-1105.

MEC-1107 Machine Shop Theory and Practice VII (2-0-6-4)

A continuation of MEC-1106.

MEC-1108 Machine Shop Theory and Practice VIII (2-0-6-4)

A continuation of MEC-1107.

MEC-1118 Introduction to Metals (3-0-0-3)

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 (2-0-3-3)

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-102 Hematology I (3-4-0-5)

Methods of theory of specimen collection (phlebotomy) are introduced. A study of formed elements of blood. Normal and abnormal values, and tests for determining them. Preparation and examination of normal blood smears. Prerequisite: Admission to the MLT program.

MLT-107 Clinical Chemistry I (3-0-0-3)

A study of the biochemical processes involved in human metabolism, particularly electrolytes and proteins. The study involves emphasis on methodologies used in the clinical chemistry laboratory. Prerequisite: None.

MLT-110 Medical Terminology (3-0-0-3)

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 Chemistry II (3-0-0-3)

A continuation of MLT 107, Clinical Chemistry I, concentrating on carbohydrates, blood gases, enzymes, and hormones. Prerequisite: MLT 107.

MLT-114 Immunohematology I (3-2-0-4)

Principles and theories of immunology and immunohematology including serology, blood group antigens and antibodies.

MLT-118 Immunohematology II (1-2-0-2)

A continuation of MLT 114 with an introduction into the selection and processing of donors, preparation and use of blood and blood components, special immunohematology conditions and methodologies. Prerequisite: MLT 114.

MLT-123 Microbiology I (3-2-0-4)

An introduction to the routine techniques of clinical microbiology and a study of the methods used for the isolation and identification of the medically important bacteria.

MLT-124 Hematology II (1-4-0-3)

An introduction to hemostasis, anemias, leukemias, special hematology procedures and examination of abnormal blood smears. Prerequisites: MLT 122.

MLT-125 Microbiology II (3-2-0-4)

A study of the medically important bacteria, microbacteria, fungi. Principles and antimicrobial susceptibility testing and quality control are introduced. Prerequisite: BIO 104.

MLT-126 Urinalysis/Parasitology (2-4-0-4)

A study of human parasites with practice in techniques used in identifying parasites in feces and other body specimens. A study of the formation of urine and urinalysis with emphasis on the role urinalysis plays in the diagnosis of disease. Prerequisite: Admission to MLT program.

MLT-211 Instrumentation (2-0-0-2)

A study of the operating principles and methodologies of laboratory instruments including routine maintenance and quality control. Field trips to various health facilities and industries will be included. Basic clinical laboratory statistics and their use in laboratory quality control is discussed. Prerequisite: MLT 112.

MLT-213 Clinical Experience I (0-0-30-10)

A general hospital orientation and practical application of laboratory skills during supervised rotations through clinical hematology and phlebotomy. Prerequisites: All MLT 100 level courses; BIO 101, 102; CHM 103, 104.

MLT-214 Clinical Experience II (0-0-30-10)

Practical application of laboratory skills during supervised rotations through clinical microbiology. Prerequisite: MLT 213.

MLT-215 Clinical Experience III (0-0-30-10)

Practical application of laboratory skills during supervised rotations through clinical microbiology. Prerequisite: MLT 214.

MLT-216 Clinical Experience IV (0-0-30-10)

Practical application of laboratory skills during supervised rotations through blood bank and serology in the clinical laboratory and phlebotomy. Prerequisite: MLT 215.

MLT-217 MLT Special Topics (2-0-0-2)

This course includes reading and discussions of current topics in laboratory medicine. Review for the Registry examination and practice with course material in a student bowl setting. Prerequisite: None.

MUS-101 Music Appreciation (5-0-0-5)

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-108 Chorus (0-0-3-1)

Student-activity course 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 (3-0-0-3))

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 course. 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 121 must be taken prior to or concurrently with NUR 101, or by permission of Program Director.

NUR-102 Medical-Surgical Nursing I (6-0-12-10)

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 121, NUT 101, PSY 103; or by permission of Program Director.

NUR-103 Medical-Surgical Nursing II (6-0-12-10)

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 Program Director.

NUR-104 Maternal-Child Health Nursing (6-0-15-11)

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 planned 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 Program Director.

NUR-107 Pharmacology (3-0-0-3)

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 relations to drug administration. Prepares the student to compute dosages and administer drugs. Practice opportunities are provided in classroom and in clinical areas. Prerequisite: MAT 112, NUR 102 or by permission of Program Director.

NUR-110 First Aid (3-0-0-3)

Instruction in accident prevention and emergency care, including CPR techniques. Stresses immediate care of accident victims.

NUR-199 Nursing Transition (3-4-0-5

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 (minumum 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. Prerequisite: Must be a graduate of an approved PNE program; or by approval of Program Director.

NUR-202 Medical-Surgical Nursing III (5-0-15-10)

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 student's needs in order to meet the stated objectives. BIO 206 must be taken prior to NUR 202. Prerequisites: NUR 103, NUR 104, NUR 107 or by permission of Program Director.

NUR-203 Medical-Surgical Nursing IV (5-0-15-10)

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 Program Director.

NUR-204 Advanced Maternal-Child Health Nursing (6-0-15-11)

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 complication 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 Program Director.

NUR-205 Psychiatric Nursing (5-0-12-9)

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 adaptive 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 experiences 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 104, NUR 107 or by permission of Program Director.

NUR-206 Nursing Seminar (2-0-0-2)

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 Program Director.

NUR-1111 Nurse Assistant I (2-2-6-5)

Survey of basic health science. Introduction to role of nursing assistant to understanding effects of illness and to learning how to perform treatment and make observation on geriatric patients. Safety measures in the care of the sick will also be covered.

NUR-1112 Nurse Assistant II (3-4-9-8)

A continuation of procedures covered in NUR 1111. Additional topics include measures to promote the patient's comfort, special types of patient care, and methods of becoming a successful health care employee. Prerequisite: NUR 1111.

NUR-1113 Home Care (2-2-0-3)

This course prepares graduates to provide basic health and personal care for infants, children, adolescents, and adults including the elderly in the home.

NUT-101 Nutrition and Diet Therapy (3-0-0-3)

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 (3-0-0-3)

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 (1-0-0-1)

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.

PHI-101 Introduction to Philosophy (5-0-0-5)

This course is designed to acquaint the student with great thinkers from Plato to modern philosophers.

PHY-101 Physics: Mechanics (3-2-0-4)

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 (3-2-0-4)

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 (3-2-0-4)

Nature of electric charge; electric forces and fields; electric potential; capacitance; current, resistance and DC circuits; forces and torques in magnetic fields; electromegnetic induction. Prerequisite: MAT 105 or equivalent.

PHY-1101 Applied Science I (3-2-0-4)

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.

PLY-1102 Applied Science II (3-2-0-4)

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 (2-0-6-4)

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 (5-0-15-10)

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 NC Plumbing Code Book.

PLU-1101A Plumbing Pipework I (2-0-6-4)

Introduction to the structure of the plumbing trade, the basic plumbing tools, job safety, basic terminology, calculation and layout of the different types of pipes and fittings used in plumbing systems. Prerequisite: None.

PLU-1101B Plumbing Pipework II (3-0-9-6)

A continuation of PLU 1101A, Plumbing Pipework I, and practical experience in the use of plumbing tools, selection of the proper material and the correct procedures used to join the various kinds of pipe and fittings used in the plumbing industry.

PLU-1111 Domestic Hot and Cold Water Systems (5-0-15-10)

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 location of pipes, valves, and pumps in both single- and multi-story buildings. Plumbing installations will be made to provide practical applications. NC Plumbing Code Book will be emphasized. Prerequisite: PLU 1101.

PLU-1111A Domestic Hot and Cold Water Systems I (2-0-6-4)

An introduction to residential and commercial hot and cold water systems. The design and layout of various plumbing fixtures including the location of pipes, valves, tanks, and pumps for single and multi-story buildings is covered.

PLU-1111B Domestic Hot and Cold Water Systems II (3-0-9-6)

A continuation of PLU 1111A, Domestic Hot and Cold Water Systems I. Practical experience in the calculations of water supply, demand, installation of water pumps, hot water heaters, storage tanks and maintenance of the hot and cold water supply systems.

PLU-1112 Installation of Plumbing Fixtures (2-0-6-4)

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. Prerequisites: PLU 1101, PLU 1111 and PLU 1115.

PLU-1115 Drainage Systems: Residential (4-0-12-8)

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. Prerequisite: PLU 1101 or previous experience.

PLU-1115A Drainage Systems: Residential I (2-0-6-4)

Introduction to the different types of drain lines and venting systems used in residential buildings.

PLU-1115B Drainage Systems: Residential II (2-0-6-4)

Continuation of PLU 1115A. Drainage system layouts, sizing and testing methods will be covered.

PLU-1116 Commercial Systems (5-0-15-10)

This course will introduce students to the principles that govern the different types of commercial equipment and techniques of installation as required by the NC Plumbing Code Book. Prerequisites: PLU 1101, 1111, 1112, and 1115 or previous experience.

PLU-1116A Commercial Systems I (2-0-6-4)

Introduction to the type of fixtures, traps, water and waste lines that are installed in commercial buildings.

PLU-1116B Commercial Systems II (3-0-9-6)

A study of the different types of drainage and venting systems that are installed in commercial buildings. Procedures for layout and sizing of the piping systems as required by the NC Plumbing Code will be covered.

POL-103 National, State, and Local Government (3-0-0-3)

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 (2-0-0-2)

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.

POL-105 Regional Geography and Culture (3-0-0-3)

A study of local attractions, recreational facilities, eating and lodging facilities, and a history of the local area. Students will also study local cultural and ethnic groups.

PSC-105 N.C. Basic Law Enforcement (16-0-24-24)

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-103 General Psychology (5-0-0-5)

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 (5-0-0-5)

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 (3-0-0-3)

Discussions concerning the effect of early family experience and the interactions of people in all types of situations are emphasized. Students also study the interactions of people in both management and subordinate positions.

PSY-203 Human Growth and Development (5-0-0-5)

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-240 Behavior Modification (5-2-0-6)

An introduction to the underlying assumptions, basic principles and techniques involved in behavior modification. A critical examination of behavior modification applied to various populations 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.

PTH-101 Introduction to Physical Therapy (3-2-0-4)

This course includes an overview of physical therapy as a profession including history, types of treatment, employment settings, and health care team relationships. Topics include selected physical therapy modalities, and patient preparation. Upon completion, students will be able to explain the role of the assistant and demonstrate competence in basic techniques of patient care.

PTH-102 Physical Therapy Procedures I (3-2-6-6)

This course is a continuation of PTH 101 with detailed study of treatment procedures including physiological principles and techniques with laboratory and initial clinical experience. Topics include application of hot packs, whirlpool procedures, ultra-sound, paraffin, massage techniques of the back and extremities, and patient response to treatment. Upon completion, students will be able to utilize hot packs, ultra-sound, paraffin, whirlpool, and be able to massage back and extremities safely and appropriately in laboratory and clinical settings. Prerequisite: PTH 101.

PTH-103 Physical Therapy Procedures II (3-2-6-6)

This course is a continuation of PTH 102 and emphasizes theory and practice of electro-therapy and reviews previously learned procedures. Topics include low and high frequency electrical currents, electrical stimulation, shortwave and microwave diathermy, and ultrasound. An introduction to the writing of progress notes will be included. Upon completion, students will be able to apply electrical stimulation, shortwave and microwave diathermy, ultrasound, write progress notes, and demonstrate knowledge of physiological principles involved. Prerequisites: PTH 102.

PTH-104 Pathology-Physiology for PT Assistants (3-0-0-3)

This course is designed to present a survey of basic pathology with emphasis on conditions most frequently seen and treated in physical therapy. Topics include basic systems of the body, the causes of disease or trauma processes, signs and symptoms, indicated treatment, and possible outcomes of conditions. Upon completion, students will be able to categorize illness and disease, understand basic pathology, identify organ or body systems involved, and explain repair processes. Prerequisite: PTH 103.

PTH-105 Functional Anatomy (2-4-0-4)

This course provides a study of applied anatomy and kinesiology with emphasis on joint function and dysfunction as seen in a rehabilitation facility. Topics include individual and group muscle locations and functions, measurement of joint motion using a goniometer, and advanced exercises. Upon completion, student will be able to know the function, location, and innervation of all major muscles and to use a goniometer in joint range. Prerequisite: PTH 103.

PTH-106 Therapeutic Exercise (3-6-0-6)

This course introduces principles and techniques of basic therapeutic exercises and ambulation as they relate to a variety of pathological conditions. Topics include routine therapeutic exercises, ambulation skills, postural routines, relaxation techniques, joint range of motion, and activities of daily living. Upon completion, students will be able to apply routine therapeutic exercises, fit crutches, walkers, and canes, and teach ambulation skills as indicated. Prerequisite: PTH 103.

PTH-201 Psychology of Adjustment (PT) (3-0-0-3)

This course is a study of basic concepts of interpersonal relationships between health worker and patients. The psychological adjustment of both patient and worker is explored. Topics include emotional reactions to disease, physical impairment, and case studies of patients with varying degrees of basic personality handicaps. Upon completion, students will be able to discuss the basis for the methods of achieving effective interaction with the patient. Prerequisites: PTH 104, PTH 105, PTH 106.

PTH-202 Physical Therapy Procedures III (3-0-12-7)

This course is a continuation of PTH 103 with advanced study of selected procedures. Topics include infra red, ultra violet, paraffin, pain management by electrical stimulation, and use of adaptive equipment and devices. Prerequisite: PTH 103.

PTH-203 Community Health and Welfare (3-0-0-3)

This course is designed to survey, identify, and describe various health and welfare resources within the community and includes field trips to selected agencies. Topics include public, private, and voluntary health organizations and their functions, resources, and proper utilization of community health agencies and the need for such agencies. Prerequisite: PTH 202.

PTH-204 Physical Therapy Procedures IV (3-0-12-7)

This course is a continuation of PTH 202 and emphasizes physical and physiological principles and techniques of application and selected physical therapy measures. Topics include advanced principles and treatment of burns, amputees, cerebrovascular accidents, cerebral palsy, spinal cord injury, and cold therapies. Upon completion, students will be able to demonstrate a moderate degree of proficiency in combining advanced therapeutic skills and modalities. Prerequisites: PTH 202.

PTH-205 Seminar in Physical Therapy Procedures (3-0-0-3)

This course includes seminars in the latest advanced techniques and equipment, allied fields and specialties, and detailed experience in written reports. Topics include pharmacology, pediatrics, extra-departmental experience reports (observing and operation, for example), case histories, and guest resource persons. Upon completion, students will be able to discuss the latest information on specialized techniques and equipment and expanded health fields, and to display maturity in writing progress notes. Prerequisite: PTH 204.

PTH-206 Clinical Education (0-0-33-11)

This course is designed to place students in a variety of clinical settings for planned learning experiences and practice under supervision for eleven weeks. Emphasis is placed on reinforcement of learned skills during direct patient care and presentation of case studies of patients. Upon completion, students will be able to develop progress reports on patients and function effectively as integral members of the physical therapy team. Prerequisite: PTH 204.

RDT-105 Patient Care/Medical Ethics (3-0-0-3)

Nursing techniques and procedures are taught with an emphasis placed on aseptic technique, proper handling of the ill injured. Also studied will be the legal and ethical obligations of the modern radiographer to student and the patient. Prerequisite: Acceptance into the program.

RDT-107 Positioning I (3-4-0-5)

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 (3-4-0-5)

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 (3-4-0-5)

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 (3-0-0-3)

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 (0-0-15-5)

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 (0-0-15-5)

A continuation of RDT 111. Clinical Education is designed to further advance the student's 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 (0-0-24-8)

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 (3-0-0-3)

An orientation to radiographic technology. History of the profession, 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 (3-0-0-3)

Basic concepts concerned with the production and recording of the radiographic image. The topics studied are radiographic tubes, x-ray production, film, cassettes, screens, processing and density.

RDT-117 Principles of Exposure II (3-2-0-4)

A detailed study of factors involved in the production of radiographics 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-118 Principles of Exposure III (2-2-0-3)

This course will deal with some special exposure techniques such as tomography and stereography. The second component will look at the concept of quality assurance and the elements involved in a quality assurance program. The third area of study of this course will entail the completion of a project or research report related to the other career opportunities in the imaging department. Prerequisite: RDT 117.

RDT-200 Management of Radiographic Emergencies (3-0-0-3)

This course will provide instruction in cardiopulmonary resuscitation, and how to manage other emergencies encountered in the Radiology department. Prerequisites: BIO 121, BIO 122.

RDT-201 Radiologic Physics I (3-0-0-3)

This course is designed to provide information about the structure and operation of the x-ray tube. An introduction into units of measurements, concepts of energy, atomic structure, electrostatics, electrodynamics, and magnetism.

RDT-202 Radiologic Physics II (3-0-0-3)

The content of this course consists of the following: electromagnetism, electric generations and motion, production and control of high voltage, rectification, rectifiers, the x-ray circuit, and special radiographic equipment. Prerequisite: RDT 201.

RDT-203 Film Critique (3-0-0-3)

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 (3-0-0-3)

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 (3-0-0-3)

A study of major special procedures, with an emphasis on equipment and procedures from cerebral and vascular studies. Also studied are the other imaging modalities in the radiology department. Computers and their application to radiology are discussed.

RDT-210 Introduction to the Study of Disease (3-0-0-3)

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 (0-0-24-8)

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 (0-0-24-8)

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 (0-0-24-8)

A continuation of RDT 216. The student will begin initial observation and participation in special procedures. Prerequisite: RDT 216.

RDT-218 Clinical Education VII (0-0-33-11)

A continuation of RDT 217. Introduction to 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-238 Radiologic Technology Seminar (3-0-0-3)

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-108 Introduction to Recreation (3-0-0-3)

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.

RTH-101 Orientation to Respiratory Therapy (4-4-0-6)

The student is introduced to the hospital setting and the department of respiratory care. A study of professional ethics, professional organizations, and the history of respiratory care. Covers the physical properties and physics of gas and piping systems, gas storage, safety standards, and regulation of pressure and flow. Introduces the patient charting and medical legal aspects as well as CPR certification, and introduction to medical emergencies. Laboratory periods include student skills evaluation. Prerequisite: Acceptance to program.

RTH-103 Cardiopulmonary Anatomy and Physiology (3-2-0-4)

Concentrated study of the heart, lungs, kidney and pulmonary vascular circulation. Disruptions of normal function and signs and symptoms manifested by the pathology are discussed. The cardiopulomonary affects of aging will be covered. The student will be further introduced to blood physiology. Labs to accompany specific topics. Prerequisite: RTH 105.

RTH-105 Theories and Principles I (3-2-0-4)

Theory of and techniques for oxygen and aerosol therapy will be covered. Includes the properties and production of therapeutic gas, humidity, and aerosols, oxygen delivering devices, analyzers, blender, artificial airways and management, cleaning and sterilization of respiratory care equipment and manual ventilation equipment. Students will demonstrate and practice with this equipment during laboratory periods. In addition, the student will be exposed to vital sign measurement and patient assessment. Prerequisite: RTH 101.

RTH-106 Pathophysiology (2-2-0-3)

A study of etiology, pathegenesis and physiology of cardiopulmonary diseases and disorders. Presents clinical signs and symptoms along with diagnosis, complications, prognosis and management. Prerequisite: RTH 105.

RTH-108 Theories and Principles II (2-2-0-3)

Covers chest physiotherapy, acid-base balance, and pulse oximetry. Introduces the student to the classification of mechanical ventilators. Theories and principles of mechanical ventilation includes the physiologic effects, indications and contraindications and modes of ventilation. Laboratory periods include student skills evaluation for assembly, calibration, and functional use of these devices. Respiratory care of the medical-surgical patient, including anesthesia effects, ventilator commitment monitoring and discontinuing of mechanical ventilation. Fluid and electrolytes will be introduced. Prerequisite: RTH 105.

RTH-109 Pharmacology (2-0-0-2)

This course provides a comprehensive introduction to the medications administered by respiratory care practitioners. Emphasis is placed on the techniques to be observed that will assure safe administration of these agents. A concise overview of drugs relating to respiratory care, including those effecting the nervous system, cardiovascular, excretory and respiratory system. Prerequisite: RTH 108.

RTH-111 Clinical Experience I (0-0-15-5)

The student will be introduced to the hospital setting and respiratory care practices. The student will assist and observe respiratory care personnel in the performance of various duties to include oxygen, humidity, and aerosol therapy. Maintenance and cleaning of equipment will be stressed. Prerequisite: RTH 101.

RTH-112 Clinical Experience II (0-0-18-6)

A continuation of RTH 111 including oxygen, aerosol and humidity therapy. New topics will include IPPB therapy, hand held nebulizer therapy, incentive spirometry, CPT, pulmonary functions, and arterial blood gases. Introduction to intensive care including mechanical ventilation and fluid and electrolyte balance. Pulse oximetry will be performed. Prerequisite: RTH 111.

RTH-113 Clinical Experience III (0-0-27-9)

A continuation of RTH 112. The student will continue to gain experience in arterial blood gas analysis and pulmonary functions. The student will also begin routing ventilator care and airway management. The student will continue indepth study of mechanical ventilation and airway management. The student will begin to understand pharmacologic effects of common cardiopulmonary drugs used in respiratory care as well as drugs effecting the nervous system and excretory system. A proficiency exam will be required for graduation or continuation of RTH 216. Prerequisite: RTH 112.

RTH-201 Ventilators (2-2-0-3)

Covers ventilator care with emphasis placed on maintenance, assembly and operation. Technical aspects of all ventilators will be covered, as well as advances in mechanical ventilation. Indepth labs will accompany the entire course.

RTH-202 Intensive Respiratory Care (2-2-0-3)

Advanced procedures and theories relating to mechanical ventilation emphasizing interpretation and application of physiological monitoring, fluid and electrolyte balance, airway management, weaning, and ABG. EKG interpretation and hemodynamic monitoring will be covered. Labs to accompany specific topics. Prerequisite: RTH 109.

RTH-204 Pulmonary Functions (2-2-0-3)

A course designed to acquaint the student with a comprehensive knowledge of diagnostic pulmonary function testing. In depth theory, calculation, interpretation, and cardiopulmonary rehabilitation will be covered. Laboratory periods include evaluation of students performing and interpreting pulmonary function tests along with equipment and maintenance. Prerequisite: RTH 105.

RTH-206 Neonatal/Pediatric Respiratory Care (2-2-0-3)

Introduces the student to neonatal and pediatric respiratory care skills, techniques, procedures and equipment. Emphasis on embroylogic development and the treatment required of premature infants. A study of genetic, iatrogenic, and diseased induced pathology as seen in both the neonate and pediatric patient. Treatment and prognosis will be studied. The student will be introduced to transporting of the high-risk infant. Prerequisite: RTH 202.

RTH-216 Clinical Experience IV (0-0-18-6)

A continuation of RTH 113. The student will gain clinical experience in intensive respiratory care to include continuous mechanical ventilation, invasive hemodynamic monitoring including venous pressure monitoring, Swan-Ganz monitoring and arterial lines as well as calibration techniques. The student will be introduced to endotracheal intubation. Prerequisite: RTH 113.

RTH-217 Clinical Experience V (0-0-27-9)

A continuation of RTH 216. The student will gain clinical experience in endotracheal intubation and be introduced to pediatric and neonatal respiratory care. The student will become familiar with interpretation of EKG's and cardiac drug therapy. Prerequisite: RTH 216.

RTH-218 Clinical Experience VI (0-0-27-9)

A continuation of RTH 217. The student will practice and become proficient in all respiratory care modalities in the critical care settings. The student will become familiar with advanced cardiac life support procedures. A proficiency exam will be required for graduation. Prerequisite: RTH 217.

RTH-220 Respiratory Therapy Department Operations (2-0-0-2)

A course designed to cover all aspects of management of a respiratory care department including space requirements, budget planning, equipment purchase, and personnel management. Prerequisite: RTH 217.

RTH-226 Registry Review Seminar (3-0-0-3)

This course will attempt to prepare students to take the National Board Exams. Major topics will include proper presentation skills for patient care presentations, studying skills, test-taking skills, test content and examination outlines. The student will practice taking written, oral and clinical simulation exams. Physicians and other key personnel will be scheduled for lectures. Prerequisites: RTH 217.

RTV-116 Broadcast Announcing (3-2-0-4)

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 the basic broadcast studio equipment and broadcast procedures.

RTV-201 Introduction to Telecommunications (5-0-0-5)

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 (5-0-0-5)

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 (5-0-0-5)

Students study the psychology of interpersonal relationships, politics and the media, principles of interviewing, and how all are interrelated in the broadcast industry.

RTV-204 Radio Production (2-4-0-4)

Creation, development, production, and presentation of broadcast announcements, interviews, commercials and dramatic program material with emphasis on the proper use of equipment to achieve effective idea communication.

RTV-205 Broadcast Programming (3-0-0-3)

Trends and requirements of broadcast programming. An analysis of community needs and tastes, station image, and the effect of self-regulatory codes on broadcasting.

RTV-206 Writing for the Media (5-0-0-5)

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 (5-4-0-7)

An introduction to the elements of television; camera operation, use of microphones, lighting and some control room techniques.

RTV-209 Television Production II (2-10-0-7)

Advanced work in producing and directing television programs.

RTV-211 Broadcast Journalism (3-4-0-5)

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 (5-0-0-5)

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 (0-0-10-3)

Operation of the College radio station.

RTV-214 Station Operations II (0-0-10-3)

Operation of the College television production facilities.

RTV-215 Station Management I (0-0-4-1)

Management of WSCC, the College radio station.

RTV-216 Station Management II (0-0-4-1)

Management and operation of the College television production facilities.

RTV-218 Broadcast Law (5-0-0-5)

The laws and regulations governing broadcasting, with a working knowledge of the relationship of governing agencies, such as Congress, courts, and the FCC. Historical and current developments in rules and regulations, law, self-regulation, right to know, right to privacy, copyright and obscenity issues are examined.

RTV-220 Introduction to Television Systems (5-4-0-7)

Students become familiar with television telecasting and receiving equipment including cameras, VTR's, transmitters, film chains, switchers, receivers, character generators, computers, video processors, processing amps, test signals, dropout compensators, projectors, interactive media, and instructional television services.

RTV-221 Troubleshooting Broadcast Equipment (3-2-0-4)

Troubleshooting and appreciation of broadcast equipment. Includes a basic understanding of studio equipment, schematics, and flow chart review. General repairs on common equipment found in radio and television stations.

RTV-227 Broadcast Field Training (0-0-40-4)

During the seventh quarter students will work in a broadcast, media, or telecommunications 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 (0-0-18-6)

During the seventh quarter students may choose to gain experience on campus at SCC by producing special projects which may include instructional types, 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 (5-0-0-5)

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 (3-2-0-4)

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 (3-0-0-3)

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 population growth and technology on society and social institutions.

SOC-102 Principles of Sociology (5-0-0-5)

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.

SOC-103 Social Problems I: Drug and Alcohol Addiction (5-0-0-5)

An introduction to the sociology of drug and alcohol addiction including history, psychology, and physiology of drug and alcohol abuse. Service delivery systems are also discussed from a regional perspective.

SPN-101 Beginning Spanish (5-0-0-5)

Upon completion of this course, students will have knowledge of some basic elements of Spanish in conversation, reading and writing.

SPN-102 Elementary Spanish I (5-0-0-5)

Continuation of SPN 101 in basic elements of conversation, reading and writing. Tapes, filmstrips, movies and extensive conversation in the classroom. Prerequisite: SPN 101.

SPN-103 Elementary Spanish II (5-0-0-5)

A continuation of Beginning Spanish and Elementary Spanish I in which students and the instructor select topics for independent study. The class meets for oral reports and discussion. Prerequisite: SPN 101 and SPN 102.

WLD-1101 Basic Welding (1-0-3-2)

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 of 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-1120 Oxy-Fuel and Arc Welding (4-0-15-9)

This course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods in the set-up and operation of welding equipment are demonstrated. Practice is given in oxy-fuel welding and cutting, brazing, silver soldering, soft soldering, and shielded metal arc welding. Prerequisite: None.

WLD-1120A Basic Oxy-Fuel Cutting (1-0-3-2)

Introduction and practical operations in the setup of oxy-fuel cutting equipment. Skill is also developed in areas of flame cutting straight and beveled edges on plate and pipe using manual and automated flame cutting equipment.

WLD-1120B Oxy-Fuel Welding and Brazing (1-0-3-2)

This course provides the student with a thorough technical understanding of oxy-fuel welding equipment setup and operation. It provides training to develop the manual skill necessary to produce high quality welds, brazing, and soldered joints in all positions.

WLD-1120C Basic Arc Welding I (1-0-3-2)

Introduction to the principles and application of electric arc welding. Skill will be developed in running beads and welding various types of joints in all positions using the E6010 electrode.

WLD-1120D Basic Arc Welding II (1-0-6-3)

A continuation of WLD 1120C using the E7018 electrode.

WLD-1121 Shielded Metal Arc Welding (4-0-18-10)

This course will be a continuation of WLD 1120 in order to give the student additional practice in welding plate steel of various thickness and in all positions to American Welding Society Codes. All safety procedures will be emphasized throughout the course. This course will enable the student to be better prepared to pass welding tests in industry. Prerequisite: WLD 1120 or previous experience.

WLD-1121A Advanced Arc Welding "Fillet Welds" (2-0-6-4)

Provides training to develop manual skill necessary to make high quality shielded arc welds in all positions on mild steel multiple pass "fillet weld" joints.

WLD-1121B Structural Welding Single Groove "with Backing Plate" (1-0-6-3)

This course provides training to develop the manual skills necessary to produce high quality groove welds with backing on thick mild steel plate in all positions required by the American Welding Society structural welding code.

WLD-1121C Structural Welding Single Groove "No Backing Plate" (1-0-6-3)

This course provides training to develop the manual skills necessary to produce high quality groove welds using the "open root joint" on thick plate as required by the American Welding Society.

WLD-1123 Gas Shielded Arc Welding (5-0-15-10)

This course is designed to teach the operation and use of gas-shielded arc welding methods (TIG/MIG). Emphasis is placed on the study of the equipment, its safety and operational demands, and practice in all welding positions. Upon completion, students will be able to setup and operate TIG and MIG welding machines and weld various size metals in all welding positions. Prerequisite: None.

WLD-1123A Basic Gas Tungsten Arc Welding (2-0-6-4)

Introduction and practical operations in the setup of gas tungsten (TIG) arc welding equipment. Skill will be developed in running beads and making fillet welds in all positions on mild steel plate.

WLD-1123B Advanced Gas Tungsten Arc Welding (1-0-3-2)

A continuation of WLD 1123A. Provides training to develop manual skill necessary to make high quality gas tungsten arc welds in all position "Groove Welds" on mild steel plate.

WLD-1123C Basic MIG Welding (2-0-6-4)

Introduction and practical operation in the setup of MIG welding equipment. Skill will be developed in running beads and welding various types of joints in all positions.

WLD-1125 Pipe Welding (3-0-12-7)

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed positions according to a welding code (e.g. AWS, ASME, API). Prerequisites: WLD 1121 and WLD 1123 or previous experience.

WLD-1125A Pipe Welding "5G" Position (1-0-3-2)

Provides training to develop skill necessary to make high quality welds on open root mild steel pipe with axis fixed in a horizontal position and beads running in the overhead, vertical and flat positions.

WLD-1125B Pipe Welding "2G" Position (1-0-3-2)

Provides training to develop skill necessary to make high quality welds on open root mild steel pipe with axis fixed in a vertical position and beads running in the horizontal position.

WLD-1125C Pipe Welding "6G" Position (1-0-6-3)

Provides training to develop skill necessary to make high quality welds on open root mild steel pipe with axis fixed at a 45° angle and beads running in flat, horizontal, vertical, and overhead positions.

WLD-1127 Blueprint Reading for Welders (2-0-3-3)

Emphasis is placed on interpretation and reading of blueprints. Information is provided on the basic elements of the blueprint: lines, views, dimensioning procedures, and notes. A thorough study of the trade drawings in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications are introduced. Prerequisite: None.

WLD-1128 Certification Practices and Mechanical Testing (3-0-12-7)

This course provides practice in welding metals to meet certification standards as established by specific codes. Emphasis is placed on the various tests established by industry and the American Welding Society using specific principles and welding procedures. Upon completion, students will be able to weld metals in all welding positions and test the welds to determine if quality welds have been produced. Prerequisite: WLD 1121, WLD 1123, WLD 1125, or previous experience.

WLD-1128A SMAW Practice and Guided Bend Test "5G" Position (1-0-3-2)

A continuation of WLD 1125A. Practice in preparation and testing pipe welds using the Guided Bend Test as required by the major welding code issuing agencies.

WLD-1128B SMAW Practice and Guided Bend Test "2G" Position (1-0-3-2)

A continuation of WLD 1125B. Practice in preparation and testing pipe welds using the Guided Bend Test as required by the major welding code issuing agencies.

WLD-1128C SMAW Practice and Guided Bend Test "6G" Position (1-0-6-3)

A continuation of WLD 1125C. Practice in preparation and testing pipe welds using the Guided Bend Test as required by the major welding code issuing agencies.

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J.D., University of North Carolina - Chapel Hill

DAVID BAILEY ..... Campus Police Officer

RICHARD L. BARDEN ..... Business
B.B.A., J.D., University of Miami

DEBORAH BECK ..... Respiratory Care Technology
A.A.S., Greenville Technical College

MABEL BENNETT ..... Secretary
A.A.S., Southwestern Community College

LYNN BISBEE ..... Drug and Alcohol Technology
B.S., University of Vermont
M.A., Wheaton Graduate School

KATHLEEN BREEDLOVE ..... Secretary

NELMA BRYSON ..... Secretary

FRANK HOWARD BUCHANAN ..... Building & Grounds Maintenance/ Masonry

CLAUDIA BUCHANAN ..... Secretary
B.F.A., Western Carolina University

MARK BUCHANAN ... Assistant Coordinator of Buildings and Grounds
Certificate, Southwestern Community College

RICKY BUCHANAN ..... Custodial Worker

SANDRA BUNN ..... Secretary

OSCAR BURGESS ..... Grounds Worker

MICHAEL BURNETTE ..... Public Safety Training
B.S., Graduate Study, Western Carolina University

ROY BURNETTE ..... Radio/TV Broadcasting Technology
B.S., Western Carolina University

DONNIE BURRELL ..... Maintenance Mechanic

JACK CABE ..... Computer Systems Programmer
A.A.S., Southwestern Community College

RAY CARPENTER ..... Maintenance Worker

JANET B. CARROLL.....Counselor, Swain County/Cherokee Center/ Instructor
B.S., M.A. Ed., Western Carolina University

BOBBY LEE CLARK .....Commercial Art and Advertising Design
B.S., Berea College
M.S., Pratt Institute

JOYCE CLOER .....Executive Secretary/Assistant for Personnel
A.A.S., Southwestern Community College

DONNA COGDILL.....Compensatory Education Coordinator/Instructor
B.S., Western Carolina University

KATHLEEN COGGINS.....Secretary/Coordinator of Extension Enrollment

RENEÉ COHEN .....Coordinator of Evening College/Accounting
B.Ed., University of Miami
M.B.E., Georgia State University

LYNDA COLLAR ..... Respiratory Care Technology
Respiratory Therapy Certification, A.A.S., Ivy Technical College

JOHN COOPER .....Custodial Worker

GRADY W. CORBIN .....Director of Admissions/Recruiting
B.S., Western Carolina University

GENE C. COUCH, JR.....Chairman, Allied Health Division
A.A.S., Southwest Virginia Community College
B.S., Mars Hill
M.A.Ed., Western Carolina University

RONNIE CRAWFORD .....Custodial Worker

WAYNE CRAWFORD .....Custodial Worker

MYRNA M. DAILY.....Director of Public Information/Instructor
B.A., Western Carolina University
Graduate Study, N.C. State University, Western Carolina University

CERETTA DAVIS..... Food Production Assistant

ELAINE DENNEY.....Computer Systems Analyst
A.A.S., Southwestern Community College

RETA DENTON..... Secretary
A.A.S., Southwestern Community College

BEVERLY DYSON .....Accounting Clerk/Assistant Cashier
B.S., Western Carolina University

JUDY FRANKLIN ..... Secretary

BARBARA FROGGE.....General Education
Diploma in Piano
B.M.E., Georgetown College
M.A., Peabody College

DEBRA GARDNER.....Physical Therapist
B.S., Louisana State University

PEGGY GATES..... Secretary/Coordinator of Financial Aid

ROSETTA GATES ..... Coordinator of Purchasing and Inventory

OWEN GIBBY .....English
B.A., N.A., Western Carolina University

SHARON GRASTY ..... Secretary

CONNIE GREGORY .....Cosmetology
Cosmetology Certification, Pisgah High School
Certificate, A.A.S., Southwestern Community College

MARY GREEN ..... Public Safety Training
A.A.S., Southwestern Community College

SHARON GUNTER..... Accounting Clerk/Assistant Cashier

CONNIE HAIRE..... Director of Resource Development/Hospitality Services/Instr.
B.S., Erskine College
M.A., Western Carolina University

MARTHA L. HAMMERLY..... Secretary

ROBERT L. HARRISON .... Business Computer Programming/English
A.A., Keesler Technical Training Center;
B.A., M.A.Ed., Graduate Study, Western Carolina University

CHARLES HARTZOG ..... Media Services Technician/Instructor
A.A.S., Southwestern Community College

TALMADGE HOYLE..... Grounds Supervisor

JUDITH HUGHES ..... Nursing Education Options
B.S.N., Medical College of Georgia
M.S., Clemson University

ROBERT HUGHES ..... Maintenance Mechanic

PATRICIA JACKSON.....Radiologic Technology
Diploma, Asheville-Buncombe Technical Community College
B.S., Mars Hill

F. DUKE JAMES ..... Food Service
A.A.S., Southwestern Community College

EUGENIA JOHNSON.....Commercial Art and Advertising Design
B.A., Berea College
M.A., East Carolina University

KATHLYN S. JOHNSON.....Medical Laboratory Technology
B.S., Western Carolina University
Certificate, Rex Hospital

PATRICIA JOHNSON .....Director of Counseling
B.S., M.A., University of Kentucky
M.Ed., University of North Carolina - Wilmington

JAMES JOYCE.....Auditorium Manager/Technical Director/Instructor
B.M., Mars Hill

JEAN KERBOW ..... Secretary

ALLEN LEDBETTER ..... Computer Systems Operator
A.A.S., Southwestern Community College

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B.S.N., Emory University; North Carolina Baptist Hospital
M.S.N., Medical College of Georgia

KATHY LOVEDAHL ..... Business
B.S.B.A., M.B.A., Western Carolina University

EDITH LUKER.....Custodial Worker

CAROL S. MARTIN.....Chairman, Commercial Division
B.A., Catawba College
M.A.Ed., Western Carolina University

TIM MARTIN..... Duplicating Technician
B.S. Ed., Fairmont State College
M.S. Ed., Montana State University

SUSAN C. McCASKILL..... Director, Macon County Center/Instructor
B.S., M.S., Western Carolina University

PATRICIA McKAY .....Media Artist/Designer
A.A.S., Southwestern Community College

DORIS MELTON .....PBX Operator/Secretary
A.A.S., Southwestern Community College

WANDA MORRIS.....Business
B.A., M.A.Ed., Western Carolina University

RITA NORRIS ..... Cashier/Accountant
B.S.B.A., Western Carolina University

JEAN PAINTER.....Secretary/Coordinator of GED Testing/Veterans Services

TOBIE PAINTER .....Grounds Worker
A.A.S., Southwestern Community College

STELLA PARKER .....Library Assistant
A.A.S., Southwestern Community College

RISA PONIROS.....Visiting Artist
B.M., University of NC – Greensboro
M.M., University of Tennessee

RONALD W. POOR ..... Electronics and Computer Engineering Technology
B.S., M.A., Appalachian State University

JAMES PORTER.....Custodial Worker

MICHAEL PRITCHETT .....English
B.S., University of Tennessee
M.A., University of Missouri

CARL QUEEN .....Chairman, Trade and Industrial Division
B.S., M.I.E., Western Carolina University

NELDA M. REID..... Director of Learning Resources Center/Instructor
B.S., Western Carolina University
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SHARON C. RIDLEY ..... Developmental Studies
B.S.Ed., M.A.Ed., Western Carolina University

JOHN S. RILEY.....Director of Regional Public Safety Training Center
B.A., M.P.A., Florida Atlantic University
L.L.B., LaSalle University

TERRY ROBINSON .....Grounds Worker

DRUCILLA SHELTON.....Director of Student Development Services/Instructor
B.S., University of Tennessee
M.A.Ed., Western Carolina University

HARRIETTA SHULER..... Director of Swain/Cherokee/Small Business Centers
B.B.A., Georgia State University
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RITA SHULER..... Secretary
A.A.S., Southwestern Community College

PATRICIA SLOAN.....Secretary/Coordinator of Student Records
A.A.S., Southwestern Community College

SHERIDAN C. SMITH .....Business
B.A., M.Ed., Western Carolina University

TERRY STAMEY..... Clerical, LBJ Job Corps
B.S., Western Carolina University

HENRY STEPHENS..... Custodial Supervisor

KRISHNA M. SWAMY .....Electronics and Computer Engineering Technology
B.S., Annamalai University, India

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B.S., Northwestern Oklahoma State University
M.S., Clemson University

MARY TRIPLETTE.....Instructor
B.A., Mary Washington College
M.A., Ph.D., University of North Carolina - Chapel Hill

FAY TYNER ..... Electroneurodiagnostics
Certificate, Duke University Medical Center

OTIS D. WATTS.....Plumbing/Welding
Certificate, Diploma, Piedmont Technical Education Center
A.A.S., Southwestern Community College

ELLEN WEEKLEY.....Human Resource Development Coordinator/
Instructor
B.A., Duke University
M.A., Western Carolina University

DENNIS WILKEY ..... Coordinator of Building and Grounds

STEVE WILSON.....Mail/Receiving/Shipping Clerk
A.A.S., Southwestern Community College

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