GASTON COLLEGE CATALOG

Opportunity with Excellence

Our 20th Anniversary Edition 1963-1983

Printed: April 1983

GASTON COLLEGE CATALOG

Notification of Nondiscrimination

Gaston College is committed to affirmative action and equal opportunity in employment and education and does not discriminate against current or potential employees or students on the basis of race, color, religion, sex, national origin, age, or handicap. Inquiries concerning the College's affirmative action/equal opportunity policy should be directed to: Vice-President of Administrative Services and Development, Box 3, Gaston College, Dallas, North Carolina 28034, (704) 922-3136.

Changes in Curriculum, Fees, and Other Requirements

The Board of Trustees and/or Administration of Gaston College reserve the right to change at any time, without notice: graduation requirements, fees and other charges, curriculum, course structure and content, and other such matters as may be within its control, notwithstanding any information set forth in this catalog. Gaston College reserves the right to cancel classes due to insufficient enrollment. Course offerings approved after publication of this catalog are described in class schedules which are issued quarterly.

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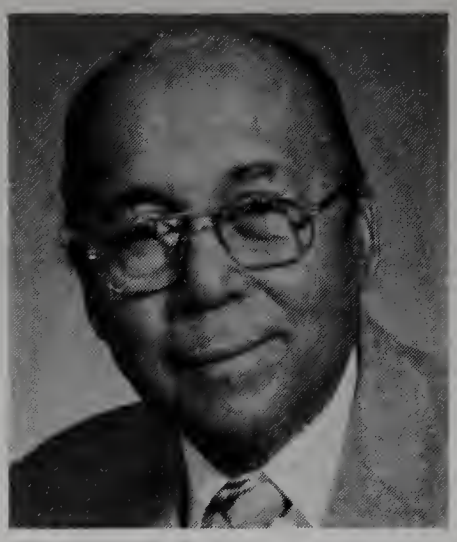

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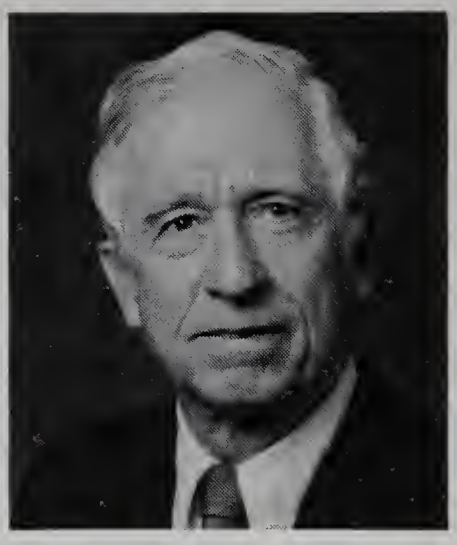

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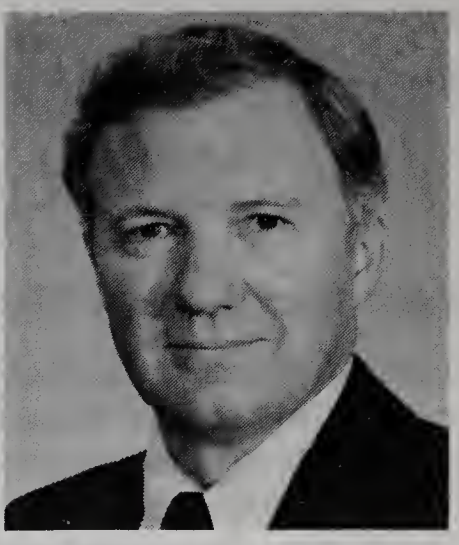

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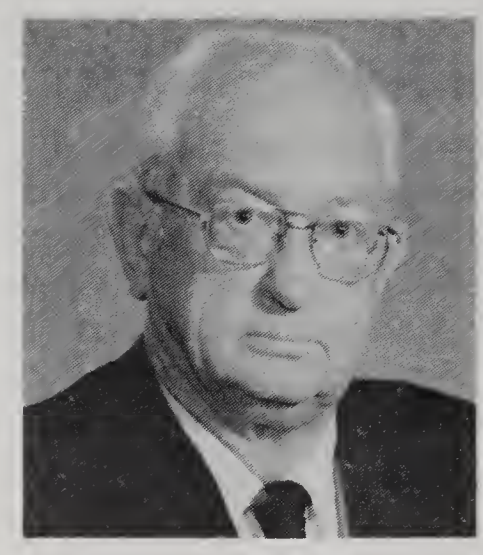

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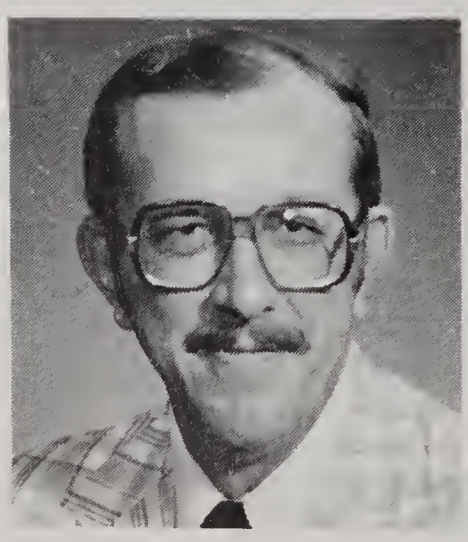


Mr. W. Wesley Styers

Dr. Thomas A. Will

TO STUDENTS AND PROSPECTIVE STUDENTS . . .

. . . Gaston College offers you an excellent environment for planning and realizing your vocational and personal developmental goals.

A staff of counselors is available to advise you on an individual basis throughout your association with Gaston College. The Job Placement Office can assist you in determining career opportunities and securing employment.

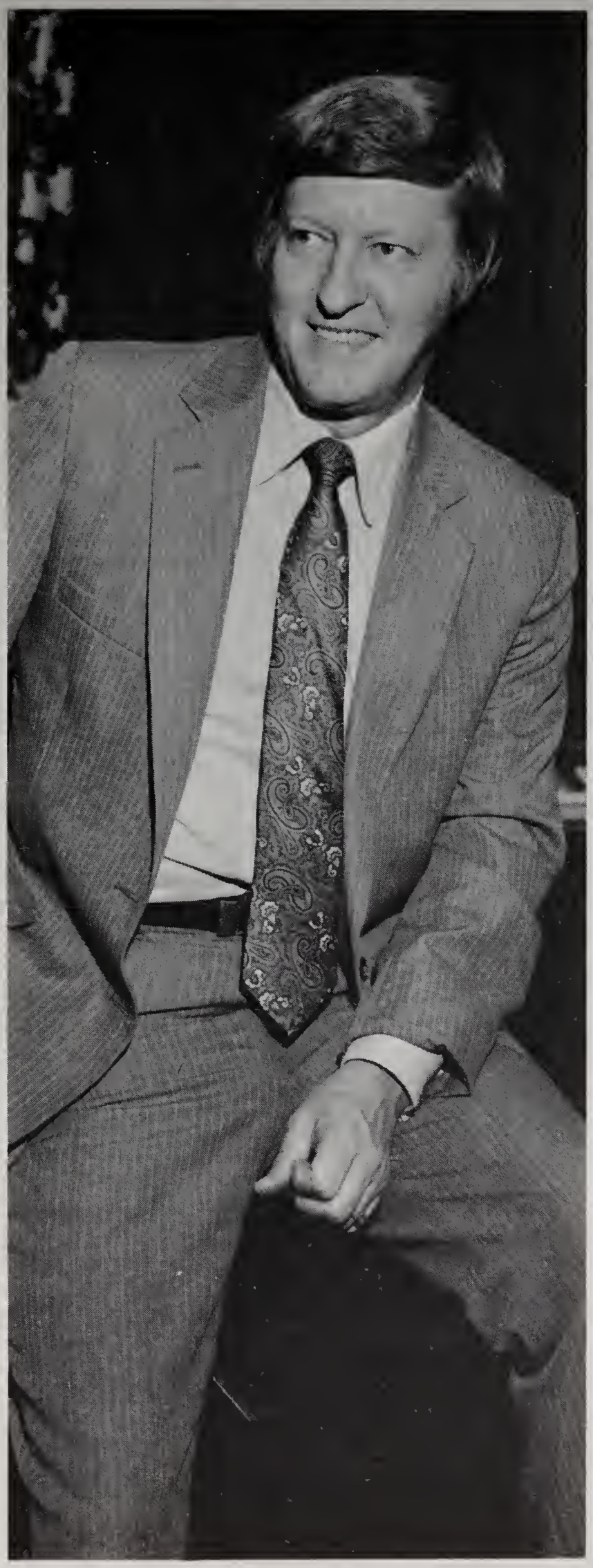
This catalog provides the basic information you will need about Gaston College. It includes admissions standards and requirements, tuition and other costs, sources of financial aid, and the rules and regulations that govern student life at Gaston College.

It is my belief that you will be proud to become a participant in one or more of the many activities or programs at Gaston College.

BEST WISHES FOR A GREAT YEAR . . .

W. Wayne Scott

W. Wayne Scott
President



TO ALL STUDENTS

The Student Government Association extends to you an invitation to become active and involved on a campus filled with opportunities.

Gaston College offers benefits and activities that are far reaching, in a learning environment that encompasses a wide range of needs and interests.

The SGA challenges you to make these opportunities work for you for an even greater return on your investment of tuition costs, time, and personal effort.

Jim Lopp
SGA President

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ADMISSIONS

COLLEGE CALENDAR OF INSTRUCTION

Spring Quarter 1983

Tuesday, March 8	Registration
Wednesday, March 9	Professional Development Day
Thursday, March 10	First day of classes
Monday, March 21	Last day to withdraw under refund policy
Friday, April 1	Official holiday
Monday, April 4	Official holiday
Friday, May 27	Last day of classes
Sunday, May 29	Graduation

Summer Quarter 1983

Monday, June 6	Registration
Tuesday, June 7	Professional Development Day
Wednesday, June 8	First day of classes
Monday, June 19	Last day to withdraw under refund policy
Monday, July 4	Official holiday
Wednesday, August 17	Last day of classes
Friday, August 19	Graduation

Fall Quarter 1983

Monday, August 29	Registration
Tuesday, August 30	Professional Development Day
Wednesday, August 31	First day of classes
Monday, September 9	Last day to withdraw under refund policy
Monday, September 5	Official holiday
Wednesday, November 16	Last day of classes

Winter Quarter 1983-84

Monday, November 28	Registration
Tuesday, November 29	Professional Development Day
Wednesday, November 30	First day of classes
Monday, December 9	Last day to withdraw under refund policy
Friday, December 16	Last day of classes before Christmas
Monday, January 2	Classes resume
Tuesday, February 28	Last day of classes

Spring Quarter 1984

Tuesday, March 6	Registration
Wednesday, March 7	Professional Development Day
Thursday, March 8	First day of classes
Monday, March 19	Last day to withdraw under refund policy
Friday, April 20	Official holiday
Monday, April 23	Official holiday
Friday, May 25	Last day of classes
Sunday, May 27	Graduation

Summer Quarter 1984 (50 days)

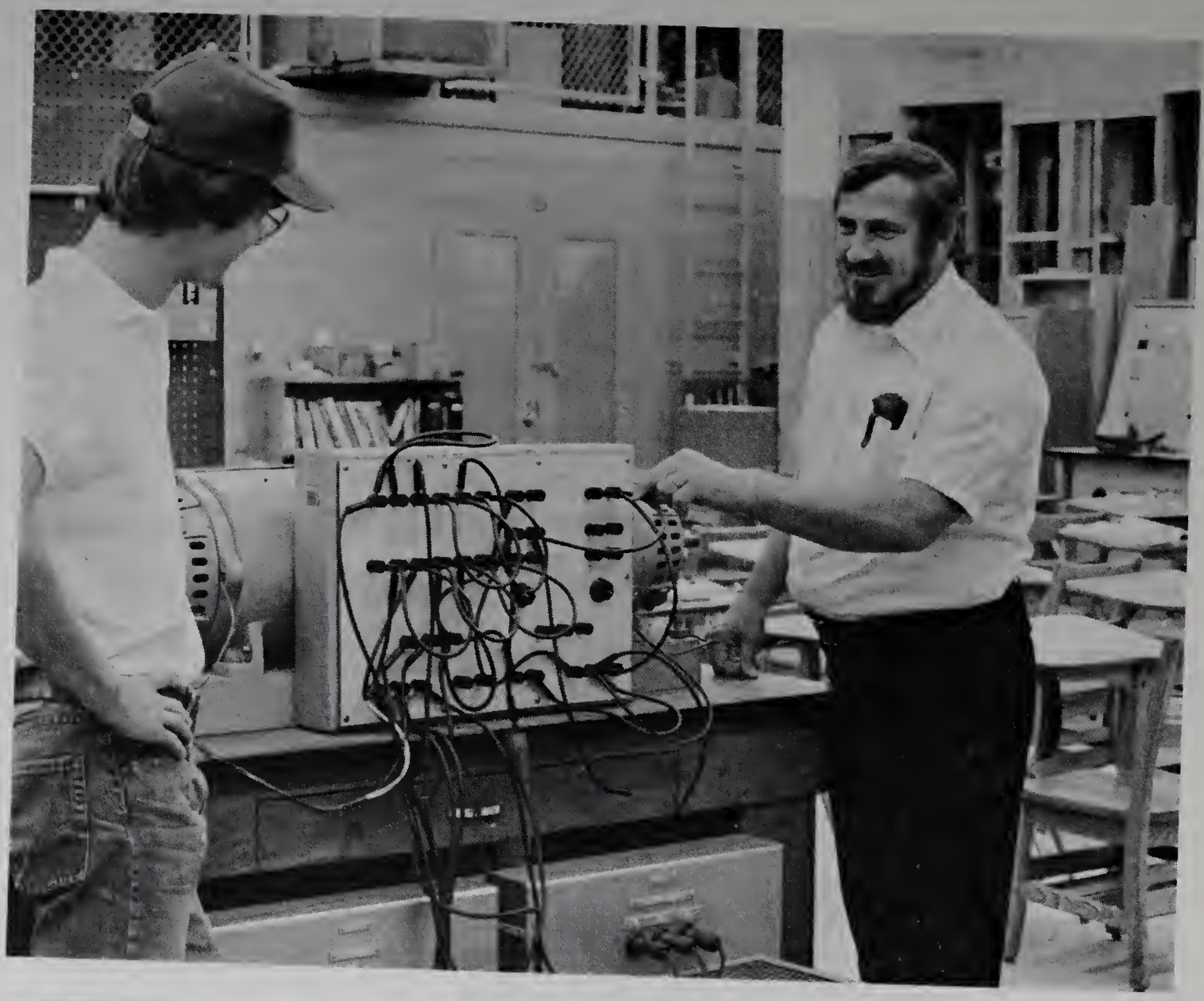
Thursday, June 7	Registration
Friday, June 8	Professional Development Day
Monday, June 11	First day of classes
Wednesday, June 20	Last day to withdraw under refund policy
Wednesday, July 4	Official Holiday
Monday, August 20	Last day of classes
Wednesday, August 22	Graduation

Fall Quarter 1984 (55 days)

Thursday, August 30	Registration
Friday, August 31	Professional Development Day
Monday, September 3	Official Holiday
Tuesday, September 4	First day of classes
Thursday, September 13	Last day to withdraw under refund policy
Monday, November 19	Last day of classes

Winter Quarter 1984-85 (55 days)

Monday, November 26	Registration
Tuesday, November 27	Professional Development Day
Wednesday, November 28	First day of classes
Friday, December 7	Last day to withdraw under refund policy
Friday, December 14	Last day of classes before Christmas
Tuesday, January 1	Official Holiday
Wednesday, January 2	Classes resume
Thursday, February 28	Last day of classes



ADMISSION TO THE COLLEGE

Admission to Gaston College is open to ALL high school graduates as well as to non-high school graduates, eighteen years of age or older. Anyone eighteen years of age or older who does not possess a high school diploma or its equivalent may be admitted to degree programs on a probationary status. Applicants to the Trade and Industrial Division are not required to be high school graduates. Applications should be submitted to the Admissions Office. Applications will be processed in order of their receipt. Students may enroll in as few as one or two courses to pursue a general interest. They may enroll in a two-year program to prepare to transfer to a four-year college, or choose a career/occupational program to prepare for a job upon completion. THE GENERAL ADMISSIONS POLICY OF THE COLLEGE DOES NOT INSURE ADMITTANCE TO A PARTICULAR COURSE OR PROGRAM. In some instances, certain courses may be restricted to program majors. Some students may be requested to enroll in special courses to eliminate scholastic deficiencies. Applicants are admitted to Gaston College without regard to race, color, creed, national origin, sex, or handicap.

If you plan to apply at Gaston College for general admission and . . .

YOU HAVE NEVER ATTENDED COLLEGE . . .

You should submit the following materials before registering for classes:

- A completed APPLICATION FOR ADMISSION form.
- A high school transcript (ask your high school to forward this transcript directly to the Office of Admissions).

All applicants eighteen years of age or older, except diploma candidates who have not been awarded a high school diploma, are asked to consult with a college counselor before completing admissions procedures.

or . . .

YOU ARE CURRENTLY ENROLLED AT ANOTHER COLLEGE OR UNIVERSITY AND PLAN TO CONTINUE ENROLLMENT THERE . . .

You should submit the following materials before you register:

- A completed APPLICATION FOR ADMISSION form.
- A letter from the dean or other appropriate administrator of your institution granting permission for you to enroll at Gaston College.

or . . .

YOU HAVE ATTENDED ANOTHER COLLEGE OR UNIVERSITY . . .

You should submit the following materials before you register.

- A completed APPLICATION FOR ADMISSION form.
- A high school transcript (ask your high school to forward this transcript directly to the Office of Admissions).
- Official transcripts from all colleges or universities you have attended (ask your former college or university to forward these transcripts directly to the Office of Admissions).

If you were not in good standing at the last college or university attended, please see a counselor at Gaston College.

or . . .

IF YOU PLAN TO REGISTER FOR ONLY ONE OR TWO CLASSES AND ARE NOT A DEGREE CANDIDATE . . .

- You should submit a completed APPLICATION FOR ADMISSION form. You may enroll for one or two courses each quarter. All applicants eighteen years of age or older who have not been awarded a high school diploma are asked to consult with a counselor before completing admissions procedures.

SPECIAL ADMISSIONS

Permission has been granted for nonhigh school graduates sixteen or seventeen years of age to attend classes at state supported community colleges. Persons in this category, who have been withdrawn from high school for at least six months, may be admitted to a high school completion or Human Resources Developmental programs at Gaston College. Those who have been withdrawn for less than six months must have written consent of the superintendent of the administrative unit in which the high school is located.

Dual Enrollment Program (Current High School students may enroll at Gaston College.)

High school junior and senior class students may be admitted to some courses at Gaston College under certain conditions. Students must be sixteen years old or older and at least a rising junior prior to actual enrollment in the College. Students must have the approval of the superintendent or his designee of their public school system and the Director of Admissions of Gaston College for credit courses or the Dean of the Continuing Education Division for noncredit courses. Students must be taking at least three courses at their high school and be making appropriate progress toward graduation as determined by the school principal. For additional information concerning special admission to Gaston College, students should contact their high school principal. All admissions are contingent upon availability of adequate classroom space.

COST TO ATTEND GASTON COLLEGE

Gaston College, supported by the taxpayers of North Carolina and Gaston County, maintains modest instructional and general fees which are subject to change by the State of North Carolina and the Board of Trustees of Gaston College.

Curriculum Program — Instructional Fee Per Quarter Hour of Credit

North Carolina Residents	Out-of-State Residents
$3.25	$16.50

The maximum quarterly instructional fee for residents of North Carolina is $39.00 for 12 or more credit hours. The maximum quarterly instructional fee for out-of-state residents is $198.00 for 12 or more credit hours.

Continuing Education Program — Registration Fee

There is an $8.00 or $15.00 registration fee per person per course (with certain exceptions). Continuing Education students pay no activity fee; however, they do pay the current parking fee.

OTHER GENERAL FEES

Student Activity Fee Per Quarter Hour of Credit

$1.00

The maximum quarterly student activity fee is $8.00 for 8 or more credit hours for in-state and out-of-state residents. Student Activity Fee is not charged for the Summer Quarter.

Some courses may require an additional supply fee. Courses requiring additional fees will be identified in the quarterly schedule.

Parking Fee

$4.00 per vehicle per year.

Parking permits are valid September 1 through August 31.

Graduation Fee

$15.00

American College Test

$9.50

The current cost is $9.50 for those students required to take the American College Test for guidance purposes, and is payable at the time the test is taken.

College Yearbook

The cost is established by the Student Government Association for those students who wish to purchase a yearbook.

Returned Checks

A fee of $5.00 will be assessed any student whose check is returned.

Right to Change Fees

All College fees are subject to change without notice.

Refunds

Curriculum Programs

A student shall not be allowed a tuition refund unless compelled to withdraw for unavoidable reasons. If a student partially withdraws before the first day of classes, a full tuition refund will be granted for those credit hours which were dropped. No student activity fee or parking fee will be refunded. If a student completely withdraws before the first day of classes, a complete refund of tuition, student activity fee, and parking fee will be granted. If a student withdraws within ten calendar days after the first day of classes, as published in the school calendar, the student will receive a two-thirds refund of tuition only if the refund is for more than $5.00. No student activity fee or parking fee will be refunded. No refunds will be considered following ten calendar days after the first day of classes. If a course fails to materialize, all the student's tuition will be refunded.

Continuing Education and Community Service Programs

The registration fee for Continuing Education students will be refunded only in the event the class is cancelled.

Drop/Add

Schedule changes may be made after a student's initial enrollment and payment of fees through the end of the registration period for the quarter. The full

instructional fee will be charged for courses added up to a total of 12 quarter hours. A full refund will be granted for courses dropped before the first day of the quarter. Two-thirds of tuition will be refunded if the student withdraws within ten calendar days after the beginning of the quarter. No refunds are made of $5 or less.

STUDENT FINANCIAL AID

Aid consisting of scholarships, grants, loans and part-time employment is designed to complement a student's own resources. Financial aid is available for an entire academic year or for part of the year.

Primary consideration in selecting aid recipients are financial need and the potential to succeed in an academic program at the College. No student who is interested in Gaston College should hesitate to apply because of financial reasons.

APPLICATION PROCEDURES FOR FINANCIAL AID: Students applying for assistance are required to complete an Application for Admission and the Family Financial Statement or other approved need analysis forms. All application forms are available in the Student Financial Aid Office on campus.

Students are urged to submit their applications early. Financial aid decisions will be made after students have been accepted by the College.

SCHOLARSHIPS and GRANTS: The General Scholarship Fund was created and is sustained by civic minded individuals and groups interested in fostering the College's purposes, programs and objectives. Scholarships and grants are renewable and do not have to be repaid. Recipients also may be considered for other types of financial assistance.

SPECIAL TALENT AWARDS: Gaston College's special talent awards broaden educational opportunities for the youth and adults of Gaston County.

This form of financial aid is awarded to students who have demonstrated academic potential and special talents or abilities in such areas as music, art, dance, drama, foreign languages, journalism, public speaking, or student organizations and athletic activities.

PELL GRANT: The Federal Government makes funds available for tuition and/or other college-related expenses to needy undergraduate students who are citizens of the United States. Grants vary from $100 to $730 per year for students at Gaston College. Applications are available in the Student Financial Aid Office on campus and at high schools. Completed applications must be mailed directly to Iowa City, Iowa, for determination of grant eligibility. A certificate of eligibility will be mailed to the applicant approximately four weeks after the application is received.

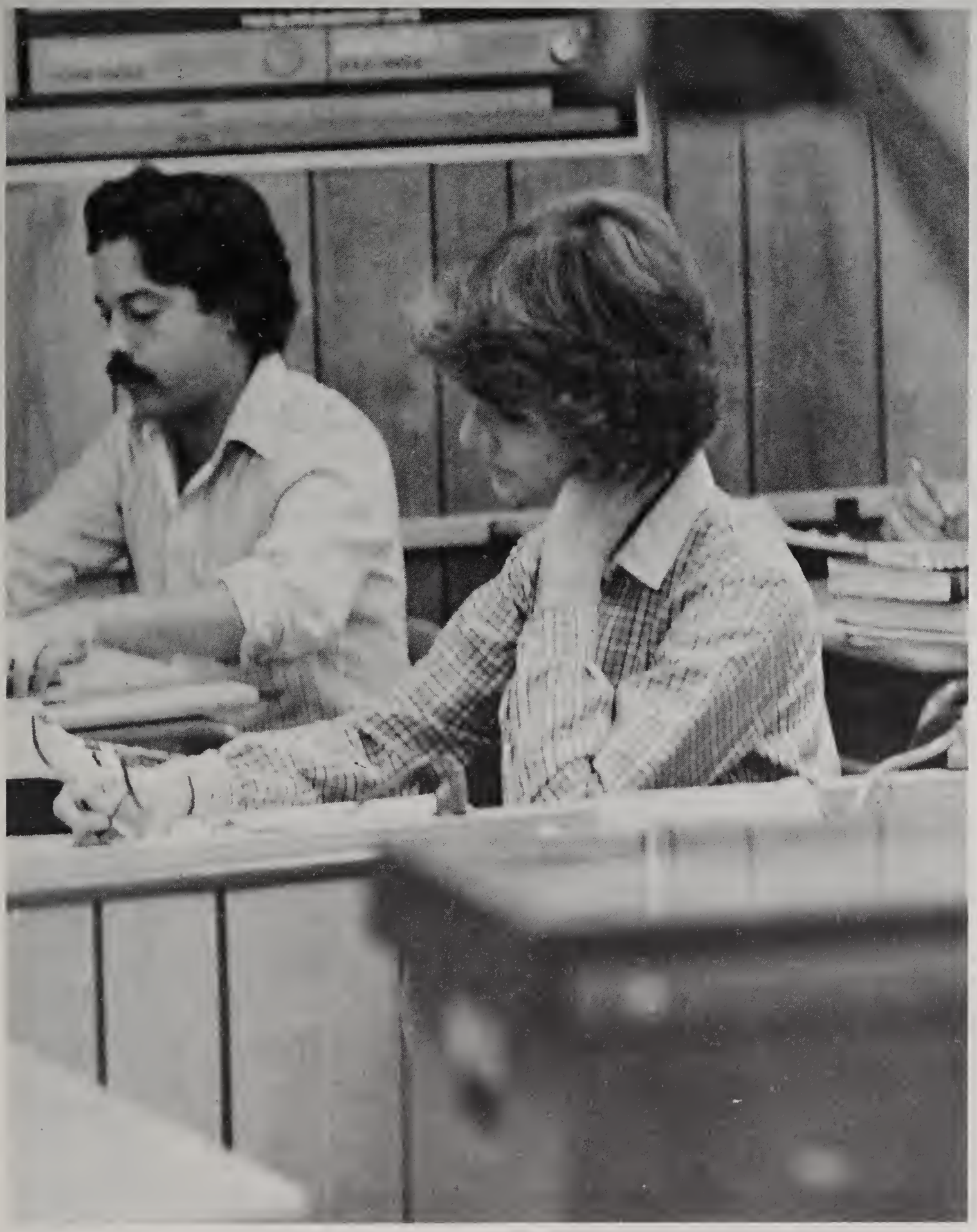
GUARANTEED STUDENT LOANS: Loans are available to students in good standing. The repayment of loan principal is not required while attending college and there is no interest during this period. Long term repayment is charged after the student leaves school. Application forms are available at banks, savings and loan offices and credit unions. All loans are contingent upon available funds.

NURSING STUDENT LOAN PROGRAM: The Federal Government makes an award to Gaston College which is to be used for loans to students who are enrolled in the Nursing Curricula. Awards are made to nursing students on the basis of financial need. When a loan is made, a schedule of repayment is selected, and the student has a period of ten years in which to repay the loan.

COLLEGE WORK-STUDY PROGRAM: This federal program provides part-time employment at the College for students needing current income to pursue their education. To be eligible, students must be enrolled for six or more credits during the quarter in which they wish to be employed. Students must also verify a need for financial assistance.

Employment under this program is limited to 15 hours per week whenever regular classes are in session and 40 hours per week when classes are not in session.

WHERE TO GET FURTHER INFORMATION: Students needing information on financial aid opportunities should contact the Office of Student Financial Aid which is located in the Myers Center at Gaston College.



EDUCATIONAL PROGRAMS

DEGREE PROGRAMS

Gaston College is supported by Gaston County and the State of North Carolina. As a locally controlled and administered institution, the College is attuned to the needs of its geographic area.

The close identification with its home area, one of the prime advantages of the comprehensive community college, leads to a diversity of educational programs and services designed specifically to meet the needs of the area's residents. The Board of Trustees and the faculty, administrators and staff of the College are committed to providing high-quality, low-cost educational programs and services to all area residents desiring such opportunities.

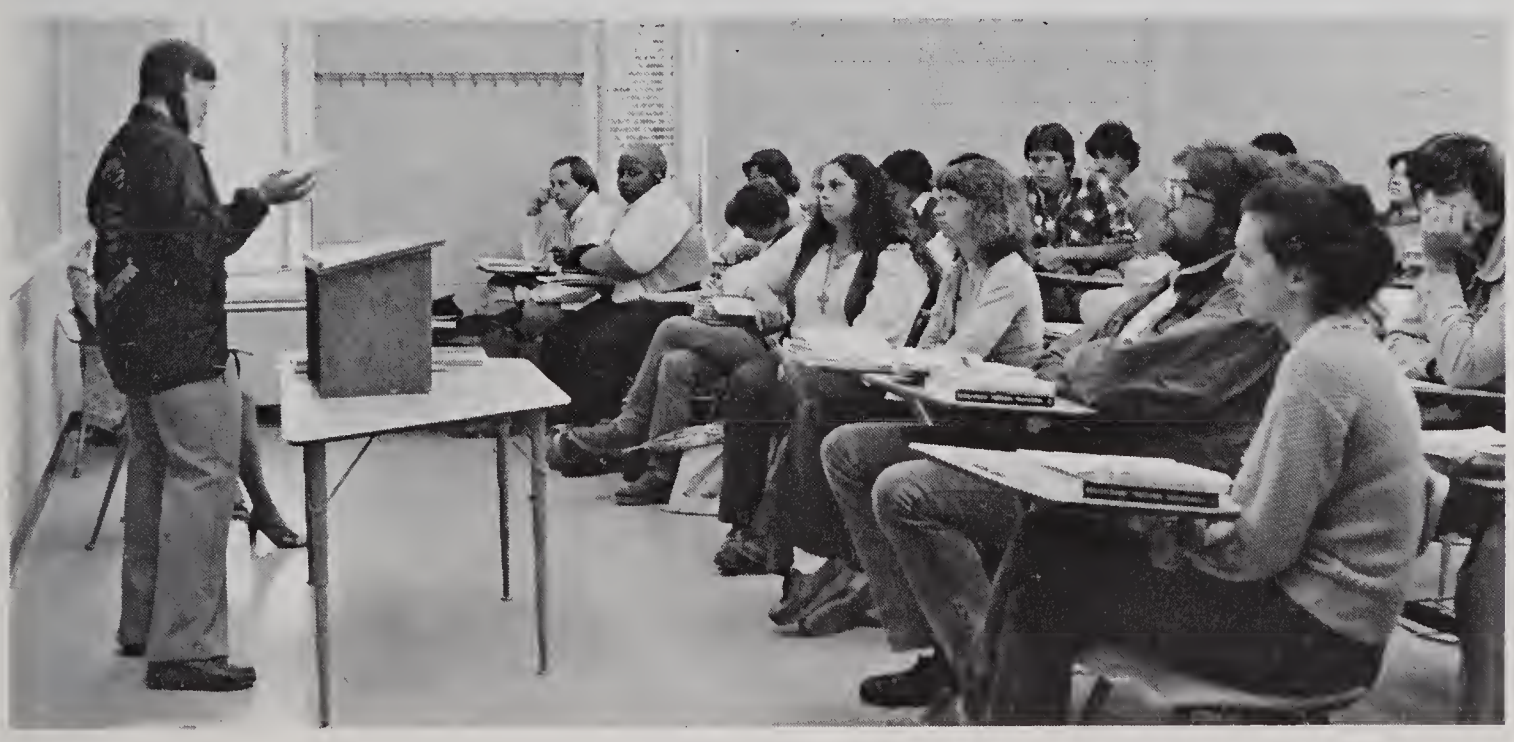
Each student should confer with a counselor about course selection prior to or at the time of registration. Only with approval of the appropriate dean may students substitute courses for those specifically required for graduation and courses outside the area of specialization.

Liberal Arts and Sciences/College Transfer Program

The Liberal Arts and Sciences curriculum includes a wide range of course offerings in liberal arts for all students at the College. Some students take only a few courses each quarter, but many enroll in a two-year sequence and earn the Associate of Arts, Associate of Fine Arts, or Associate of Science Degree.

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

Gaston College's College Parallel curriculum includes many courses designed to prepare students for upper division study in such fields as business, education, engineering, dentistry, law, and medicine. A specially designed general transfer sequence of courses is also available for students who have not decided upon a major but intend to transfer their credits toward a four-year degree. Requirements for the first two years of study vary at each four-year school. Students who intend to transfer their credits should plan their courses with a Gaston College counselor to be certain they will meet the current requirements at four-year colleges and universities.



Career and Technical/Occupational Programs

The Career and Technical/Occupational preparation programs meet the ever-growing need of the local community for technicians and paraprofessionals at the associate degree and diploma levels. Many students enroll in a sequence leading to either an associate degree or a diploma. Others take shorter sequences in order to refresh or improve the knowledge and skills they already possess. Programs are provided in business, engineering technology, trades, health and public service. STUDY ON A FULL OR PART-TIME BASIS, DAY OR EVENING, IS POSSIBLE.

In many cases, associate degree students may transfer credits toward a four-year degree in a senior college or university. Students should consult with a Gaston College counselor when interested in transferring.

In all cases, knowledgeable professionals are available at Gaston College to help students identify occupational goals in line with their interests and abilities.

Programs are planned, not just for today, but for tomorrow, so that students may anticipate more realistic opportunities for employment following the attainment of their educational objectives.

Career Programs at Gaston College

ALLIED HEALTH TECHNOLOGY
T-059 Nursing
T-058 Medical Office Assistant

BUSINESS TECHNOLOGIES
T-016 Accounting
T-112 Banking and Finance
T-018 Business Administration/Management
T-022 Computer Science
T-058 Medical Office Assistant
T-030 Secretarial-Executive
T-031 Secretarial-Legal
T-032 Secretarial-Medical
T-034 Transportation
T-143 Fashion Merchandising & Marketing Technology

ENGINEERING TECHNOLOGIES
T-038 Civil Engineering Technology
T-044 Electrical Engineering Technology
T-045 Electronics Engineering Technology
T-047 Industrial Engineering Technology
T-049 Industrial Management Technology
T-051 Mechanical & Production Engineering Technology

PUBLIC SERVICE TECHNOLOGIES
T-073 Early Childhood Associate
T-063 Fire Science
T-162 Museum Technology
T-129 Criminal Justice
T-107 Social Service Associate
T-088 Teaching Associate, Reading Option

DIPLOMA PROGRAMS
V-024 Air Conditioning, Heating and Refrigeration
V-003 Automotive and Diesel Mechanics
V-043 Broadcasting—Radio/TV
V-013 Diesel Vehicle Maintenance
V-017 Drafting—Mechanical and Architectural
T-165 General Office Technical Speciality
V-018 Electrical Installation & Maintenance
V-042 Electronics Servicing/Industrial Electronics
V-032 Machinist
V-038 Practical Nursing
V-050 Welding

CONTINUING EDUCATION AND COMMUNITY SERVICE PROGRAMS

The College is committed to offering a broad range of educational, cultural, recreational and occupational offerings to meet the continuing and community education needs of county residents. In addition to offering credit courses at off-campus sites throughout the county and via media such as television and newspapers, the College provides noncredit courses, workshops and seminars. Special programs are designed as determined by public interest. The College also shares its resources with community organizations and residents through use of the College facilities, extension of cultural activities, and sharing of faculty and administrative expertise.

Off-campus Credit Courses

The off-campus credit instructional program provides classes at times convenient to students in locations near their homes or places of employment. Classes are held in public schools as well as in businesses and industrial plants.

Noncredit Classes

Noncredit courses and programs in a variety of subjects are offered both on the campuses and at satellite sites throughout the county for career development, professional advancement, personal enrichment, and leisure time activities.

Community Service Programs

Courses are designed for students who wish to improve themselves culturally and educationally, or who wish to develop an avocational interest. Courses are offered to meet the needs and demands of the people served.

Business and Industry Programs

Courses, workshops, and seminars focus on industry-related topics to enable managers and employees to upgrade job skills.

Seminars and Workshops

Seminars and workshops are effective ways of meeting training needs of business and industry. Gaston College has developed the Professional Institute of the Gaston College Foundation, Inc., to provide quality instruction designed to improve professional, managerial and supervisory skills. The CEU is awarded to individuals who accomplish the stated objectives of the instruction.

Continuing Education Unit (CEU)

The CEU is awarded to individuals for those noncredit activities which have been organized to provide unified and systematic instruction measurable in duration of time, subject to performance evaluation for the participant, and which meet the specified criteria.

A large number of governmental agencies, professional associations, licensing boards and commissions, and private employers utilize the CEU to recognize noncredit educational experiences.

DEVELOPMENTAL/ADVANCEMENT STUDIES PROGRAM

Gaston College is committed to rendering assistance to those students of the community who desire to further their education but may not have the academic background to pursue their goals. As a means of demonstrating this commitment, the College has as one of its major goals, a developmental/advancement studies program consisting of a series of foundation courses in math, English, reading, study skills, chemistry, and self-development specially designed to help students overcome deficiencies in areas of weakness.

Credit hours earned for developmental or advancement courses generally do not transfer and may not be used to satisfy the requirements for an associate degree or diploma unless such courses are a part of the prescribed curriculum.

Adult Basic Education (ABE)

The Adult Basic Education program offers adults the opportunity to acquire academic skills in reading, English, and mathematics from the most basic level through levels normally taught in junior high school. The ABE program is a joint federal-state activity and is offered free to the public.

General Education Development

The GED program offers adults an opportunity to prepare for and complete the General Educational Development Test. Upon successful completion of the five examinations, the student will receive a High School Equivalency Diploma from the North Carolina Department of Community Colleges.

Human Resources Development Program

The HRD program offers adults a comprehensive educational activity designed to increase the employability of the unemployed or underemployed.

Learning Laboratories

Learning labs, which are multi-purpose instruction facilities, are located at the Dallas campus, Lincolnton campus, and at the Pharr-Stowe Learning Center in McAdenville. These labs are open to adults and students who need to complete high school, strengthen skills, and review or gain new knowledge in academic or technical areas.

A wide variety of auto-tutorial, programmed, video-taped, self-paced full course and skill module materials are available for refresher or review to high school graduates planning to gain new knowledge in a wide variety of academic or technical areas. Refresher and review materials are available for high school graduates planning to enter college and for others anticipating examinations necessary to qualify for specific jobs or occupational licensing. General interest courses are available for the adult who wishes to satisfy a specific need or to spend leisure time learning for self-enrichment. These courses are free to any adult eighteen years and older or to any high school student enrolled in the dual enrollment program.

A unique function of the learning lab is the skills lab and tutorial service for currently enrolled curriculum students having academic difficulty or who need to make up assignments, gain mastery in certain skills, or fulfill the required lab portion of a curriculum class.

The labs are staffed by qualified instructors who help students determine their present level of learning before placing them in self-instructional texts. The labs are open from 8:00 a.m. each morning until the College closes at night.

English as a Second Language (E.S.L.)
Due to the immigration into Gaston and Lincoln counties of a large number of non-English speaking adults and their families, classes specifically designed to teach spoken and written English are offered. These classes are free of charge, may be organized at any time, and instruction scheduled at any time of day or evening.

Credit Courses by Television and Radio
Television courses offer students the opportunity to earn college credits primarily at home. A qualified instructor is in charge of each course and is available for telephone and personal consultation. In addition, the instructor schedules lectures and seminars to augment the media instruction.

Transfer to Senior Colleges and Universities

The Associate of Arts, the Associate of Fine Arts, and the Associate of Science are two year programs that prepare the student to transfer to senior colleges. The student, in most cases, will transfer the entire two years of study from Gaston College and will enter the senior college or university as a third year student.

The Associate of Applied Science Degrees are two year terminal programs that prepare the student for the job market. However, there are some senior institutions where these degrees are accepted as the first two years of a four year program. A few of the senior institutions which accept *some* of our Applied Science Degrees are:

Appalachian State University
Mars Hill College
Sacred Heart College
Western Carolina University
Gardner-Webb College
Pfeiffer College
University of NC at Charlotte
Winston-Salem State University

Some senior institutions will evaluate the Associate of Applied Science on a course to course basis.

The counseling staff will provide assistance to students concerning transfer to other institutions. Transfer of credits from one institution to another is subject to change. Therefore it is the responsibility of the transferring students to research their prospective senior institution. Students may contact the Counseling Department of Gaston College or the Admissions Office at the college to which they plan to transfer for information and guidance on transfer of credits.

GRADUATION REQUIREMENTS

Associate of Arts Degree

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

Art	Law	Social Work
Business Administration	Ministry	Elementary Education
Early Childhood Education	Music	Secondary Education
Journalism		

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

A. General Graduation Requirements
   1. The satisfactory completion of no fewer than 96 quarter hours.
   2. The completion of no fewer than 30 of the above 96 hours while in attendance at Gaston College. A student is to attain a C (2.00) average on all work presented for graduation.

B. Specific Graduation Requirements
   1. Minimum competency in communication as verified by the following sequence:
      English 101, English 102;
   2. The completion of 14-18 quarter hours from the following humanities courses:
      a. Art 101, 103; Dra 101; Mus 101, or 102, 103, 104;
      b. Eng 201, 202, 203, 204;
      c. Fre 100, 101, 102, 201, 202; Spa 100, 101, 102, 201, 202;
      d. Phl 200, 201;
      e. Rel 101, 102, 103, 210.
   3. The completion of 5-10 hours of mathematics from the following courses:
      a. Mat 100, 102;
      b. Mat 101, Mat 102 or Phl 203, or Dap 171, or Dap 141;
      c. Mat 101, 104;
      d. Mat 101, 105 or 210;
      e. Mat 105, 106 or 210.
   4. The completion of 12 hours of a biological or physical laboratory science sequence from the following courses:
      a. Bio 101, 102 or 103, 104 or 105;
      b. Chm 101, 102; Esc 101, 102;
      c. Geo 101, 105; Geo 101, Gly 102;
      d. Phy 211, 212, 213.
   5. The completion of 12-15 hours of social science from the following courses:
      a. Ant 204, 206;
      b. Eco 201, 202;
      c. Geo 111, 112, 204, 205;
      d. His 101, 102, 103, 104;
      e. His 201, 202, 210;
      f. Pol 110, 201, 203;
      g. Psy 201, 205, 103;
      h. Soc 102, 103.
   6. The completion of 3-6 hours of physical education. Three hours should be 3 activity courses chosen from the following:
      a. Ped 100, 102, 103, 104;

b. Ped 105, 106, 107, 108, 111;
c. Ped 112, 113, 114, 117, 118;
d. Ped 120, 225, 260;
e. Others that can be selected include Ped 201, 210, 230, 231.

C. Elective Graduation Requirements
1. A total of no fewer than 25 quarter hours of electives to be selected from any of the following areas:
a. Humanities;
b. Science and Mathematics;
c. Social Sciences;
d. Business offerings (Act 201, 202; Dap 141, 142; Dap 171, 172; Dap 181, 182.) Edu 201, EDU 203.
2. Courses used to satisfy the preceding B-1, B-2, B-3, B-4, or B-5 requirements may not be used again for this elective requirement.

Associate of Fine Arts Degree

Students who select the Associate of Fine Arts degree at Gaston College transfer to senior colleges to pursue such majors as:

Art Music Drama

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

A. General Education Requirements
1. The satisfactory completion of no fewer than 96 quarter hours.
2. The completion of no fewer than 30 of the above 96 hours while in attendance at Gaston College. A student is to attain a C (2.00) average on all work presented for graduation.

B. Specific Graduation Requirements
1. Minimum competency in communications as verified by the following sequences:
English 101, English 102;
2. The completion of 12 quarter hours from the following humanities courses:
a. Art 101, 103; Dra 101; Mus 101, or 102, 103, 104;
b. Eng 201, 202, 203, 204;
c. Fre 100, 101, 102, 201, 202; Spa 100, 101, 102, 201, 202;
d. Phl 200, 201;
e. Rel 101, 102, 103, 210.
3. The completion of 5-10 quarter hours in mathematics and/or science from the following courses:
a. Mat 100 or 101, 102, 104, 105, 210;
b. Bio 101, 102, 103, 104, 105;
c. Chm 101, 102;
d. Esc 101, 102;
e. Geo 101, 105;
f. Gly 102.
4. The completion of 9 quarter hours of social science from the following courses:
a. Ant 204, 206; Eco 201, 202;
b. Geo 111, 112, 204; His 101, 102, 103, 104; 210;
c. His 201, 202; Pol 110, 203;

d. Psy 201, 205, 103;
e. Soc 102, 103.

5. The completion of 3 quarter hours of physical education.
6. A total of no fewer than 36 quarter hours of professional program courses to be chosen from the following courses in art or music:
   a. Art 111, 112 are essential for one in the art area;
   b. Art 121, 122, 123, 125;
   c. Art 131, 132, 133;
   d. Art 141, 142, 143, 145;
   e. Art 151, 152, 153, 155;
   f. Mus 111, 112, 113, 211, 212, 213 are essential in the music area;
   g. Mus 125, 126, 127;
   h. Mus 134, 135, 136;
   i. Mus 131, 141, 142, 143, 144;
   j. Mus 154, 155, 156, 161.

C. Elective Graduation Requirements
   1. A total of no fewer than 3 quarter hours of electives should be selected from any of the following areas:
      a. Humanities;
      b. Science/Mathematics;
      c. Social Sciences.
   2. Courses used to satisfy the preceding B-1, B-2, B-3, B-4, B-5 requirements may not be used again for this elective requirement.

Associate of Science Degree

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

Agriculture	Medicine	Science-Chemistry Option
Dentistry	Optometry	Science-Physics Option
Engineering	Pharmacy	Veterinary Medicine
Forestry	Physical Therapy	
Mathematics	Science-Biology Option	

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

A. General Education Requirements
   1. The completion of no fewer than 96 quarter hours.
   2. The completion of no fewer than 30 of the above 96 hours while in attendance at Gaston College. A student is to attain a C (2.00) average on all work presented for graduation.

B. Specific Graduation Requirements
   1. Minimum competency in communications as verified by the following: English 101, English 102.
   2. The completion of 6 quarter hours from the following humanities courses:
      a. Art 101, 103; Mus 101, or 102, 103, 104;
      b. Eng 201, 202, 203, 204;
      c. Fre 100, 101, 102, 201, 202; Spa 100, 101, 102, 201, 202;
      d. Phl 200, 201;
      e. Rel 101, 102, 103, 210.
   3. The completion of 20 quarter hours of mathematics from the following courses:
      a. Mat 101, 102, 104, 105, 210;
      b. Mat 106, 107, 206, 207 (are preferred.)

4. The completion of 24 quarter hours of laboratory science sequence from the following courses:
   a. Bio 101, 102 or 103, 104, 105;
   b. Chm 101, 102, 211, 212;
   c. Geo 101; Gly 102; Esc 101, 102;
   d. Phy 211, 212, 213.
5. The completion of 9 quarter hours of social science from the following courses:
   a. Ant 204, 206; Eco 201, 202;
   b. Geo 111, 112, 204;
   c. His 101, 102, 103, 104, 210;
   d. His 201, 202; Pol 110, 201, 203;
   e. Psy 201, 205, 103;
   f. Soc 102, 103.
6. The completion of 3-6 hours of physical education. Three hours should be activity courses chosen from the following:
   a. Ped 100, 102, 103, 104;
   b. Ped 105, 106, 107, 108, 111;
   c. Ped 112, 113, 114, 117, 118;
   d. Ped 120, 225, 260;
   e. Others that can be selected include Ped 201, 210, 230, 231.

C. Elective Graduation Requirements
1. A total of no fewer than 21 quarter hours of electives to be selected from any of the following areas:
   a. Humanities;
   b. Mathematics;
   c. Science;
   d. Social Science;
   e. Physical Education;
   f. Business offerings (Act 201, 202; Dap 141, 142; Dap 171, 172; Dap 181, 182.)
   g. Edu 201, Edu 203.
2. Courses used to satisfy the preceding B-1, B-2, B-3, B-4, B-5, B-6 requirements may not be used again for this elective requirement.

Associate of Applied Science

The minimum requirements for the Associate of Applied Science Degree varies with the field of concentration, ranging from 101 to 119 quarter hours of work numbered 100 or above. The completion of no fewer than thirty (30) quarter credit hours while in attendance at Gaston College is required.

A student is eligible to graduate with an Associate of Applied Science Degree upon completion of the curricula requirements for the particular program listed in this catalog.

A student must have a 2.00 grade point average on courses presented for graduation.

General Studies

General Studies is a program designed to offer a comprehensive, integrated study of English, Social Studies, Mathematics, Career Preparation and Personal Development. The program offers Liberal Arts courses designed to fulfill the first year of college with the exception of science. Classes are restricted to allow for closer student teacher relationships and academic supervision. (See General Studies Curriculum sheet.)

Credits earned in General Studies may be interpreted as follows:

Course	Equivalent
Com 101	Rdg 101
Com 102	Eng 101
Ssc 101	His 101
Ssc 102	His 102
Ssc 103	His 103

General Studies are scheduled for four hours per day, five days a week, for nine months.

Diplomas

The minimum requirement for a diploma varies with the field of concentration.

A student is eligible to graduate with a diploma upon completion of the curricula requirements for the particular program listed in this catalog.

A student must have a 2.00 grade point average on courses presented for graduation.

Certificates

A minimum requirement for a certificate varies with the field of concentration.

A minimum of 75 percent of the requirements for the certificate must be completed at Gaston College.

A student must have a 2.00 grade point average on courses presented for graduation.

Associate of Applied Science Degree in Accounting (T-016)

Purpose of Curriculum

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

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

With experience and additional education, the individual should be able to advance to positions such as auditor, systems manager, systems analyst, data processing manager and cost accountant.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
BUS	104	Introduction to Business	5	0	5
BUS	111	Business Mathematics	5	0	5
BUS	101	Beginning Typewriting	2	3	3
ENG	101	Freshman Grammar & Composition	5	0	5
			17	3	18

SECOND QUARTER

			Class	Lab	Credit
ACT	201	Principles of Accounting, Int.	5	0	5
BUS	121	Principles of Management	5	0	5
DAP	141	Introduction to COBOL Programming	3	4	5
			13	4	15

THIRD QUARTER

			Class	Lab	Credit
ACT	202	Principles of Accounting	5	0	5
BUS	213	Principles of Finance	5	0	5
BUS	112	Business Report Writing	5	0	5
		Humanities Course	3	0	3
			18	0	18

FOURTH QUARTER

			Class	Lab	Credit
ACT	203	Intermediate Accounting	5	0	5
ACT	206	Income Tax Accounting	5	0	5
ACT	208	Managerial Accounting	5	0	5
BUS	209	Business Law	5	0	5
			20	0	20

FIFTH QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting	3	0	3
ACT	204	Intermediate Accounting	5	0	5
ACT	205	Cost Accounting	5	0	5
ECO	201	Principles of Economics	5	0	5
			18	0	18

SIXTH QUARTER

			Class	Lab	Credit
ACT	207	Auditing	5	0	5
BUS	210	Business Law	5	0	5
ECO	202	Principles of Economics	5	0	5
			15	0	15

Total Hours Required for Graduation 104

Humanities Courses: Art, Literature, (except ENG 102), Modern Language, Music, Philosophy (except PHL 203), Religion.

DIPLOMA IN TRADE AND INDUSTRIAL PROGRAMS IN AIR CONDITIONING, HEATING AND REFRIGERATION (V-024)

Purpose of Curriculum

In recent years the use of air conditioning, heating and refrigeration equipment has increased tremendously. With this great up-swing in the use of such equipment, a greater demand is made on trained personnel to plan and supervise its operation and maintenance.

This curriculum is designed to meet the basic requirements of a program to provide capable service persons in the industry. The principal objective has been to outline the required technical information and theoretical knowledge, while maintaining a good balance of manipulative skills. Considerable emphasis is placed on self-development in an effort to encourage the individual trained hereby to continue to study and grow as the industry advances.

Job Description

The air conditioning, heating and refrigeration serviceperson is employable in areas of sales, maintenance, installation, and production. The individual is involved with equipment for changing temperature, control systems, and ducts, and piping for distribution of air, water, steam, and refrigerants.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
AHR	1101	Principles of Refrigeration	3	12	7
ENG	1101	Reading Improvement	2	0	2
MAT	1101	Trade Math I	4	0	4
PHY	1112	Basic Electricity	3	3	4
WLD	1111	Gas Welding Fundamentals	0	3	1
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
AHR	1102	Domestic and Commercial Refrigeration	3	12	7
AHR	1122	Automatic Controls I	3	3	4
DFT	1111	Blueprint Reading	0	3	1
ENG	1102	Communication Skills	2	0	2
MAT	1102	Trade Math II	4	0	4
			12	18	18

THIRD QUARTER

			Class	Lab	Credit
AHR	1103	Principles of Air Conditioning	3	9	6
AHR	1113	Calculation of Heat Loss & Gain	6	0	6
AHR	1133	Solid State Controls	3	3	4
AHR	1153	Transport Refrigeration	0	3	1
WLD	1112	Arc Welding Fundamentals	0	3	1
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
AHR	1104	All-Year Comfort Systems	3	6	5
AHR	1114	Estimating	4	3	5
AHR	1154	Reverse Refrigeration	2	6	4
AHR	1164	Automotive Air Conditioning	3	3	4
			12	18	18

Total Hours Required for Graduation 72

DIPLOMA IN TRADE AND INDUSTRIAL PROGRAMS IN AUTOMOTIVE AND DIESEL MECHANICS (V-003)

Purpose of Curriculum

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussions and shop practice.

Job Description

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. They use shop manuals and other technical publications.

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

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
AUT	1101	Automotive Engines	3	12	7
ENG	1101	Reading Improvement	2	0	2
MAT	1101	Trade Math I	4	0	4
PHY	1111	Basic Mechanics	3	3	4
WLD	1111	Gas Welding Fundamentals	0	3	1
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
AUT	1102	Auto Electrical	6	9	9
AUT	1112	Auto Fuels	4	6	6
ENG	1102	Communication Skills	2	0	2
WLD	1112	Arc Welding Fundamentals	0	3	1
			12	18	18

THIRD QUARTER

			Class	Lab	Credit
AUT	1103	Automotive Power Train Systems	3	12	7
AUT	1113	Automotive Chassis & Suspensions	3	3	4
AUT	1133	Auto Air Conditioning	4	3	5
PSY	1102	Human Relations	2	0	2
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
AUT	1104	Automotive Servicing	6	9	9
AUT	1154	Introduction to Diesel Engines	3	6	5
AUT	1164	Braking Systems	3	3	4
			12	18	18

Total Hours Required for Graduation 72

ASSOCIATE OF APPLIED SCIENCE DEGREE IN BANKING AND FINANCE (T-112)

Purpose of Curriculum

The Banking and Finance program is designed to train those individuals seeking careers in the banking profession and to upgrade the skills of currently employed banking personnel.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
AIB	202	Principles of Banking Operations	3	0	3
BUS	111	Business Math	5	0	5
BUS	272	Principles of Supervision	3	0	3
ENG	101	Freshman Grammar & Composition	5	0	5
			16	0	16

SECOND QUARTER

			Class	Lab	Credit
ACT	201	Principles of Acounting, Intro.	5	0	5
AIB	209	Installment Credit	3	0	3
AIB	210	Money & Banking	3	0	3
AIB	230	Selling Bank Services	1	0	1
ENG	103	Public Speaking	5	0	5
			17	0	17

THIRD QUARTER

			Class	Lab	Credit
ACT	202	Principles of Accounting	5	0	5
AIB	206	Law & Banking	3	0	3
AIB	208	Consumer Compliance	1	0	1
AIB	231	International Banking	3	0	3
BUS	108	Business Communications	5	0	5
			17	0	17

FOURTH QUARTER

			Class	Lab	Credit
AIB	203	Bank Cards	3	0	3
AIB	233	Analysis of Financial Statements	5	0	5
BUS	210	Business Law	5	0	5
DAP	150	Computer Fundamentals	3	2	4
			16	2	17

FIFTH QUARTER

			Class	Lab	Credit
AIB	201	Economics in Banking	3	0	3
AIB	205	Inside Commercial Banking	3	0	3
AIB	234	Loan Officer Development	3	0	3
AIB	235	Trust Functions & Services	3	0	3
BUS	168	Salesmanship	5	0	5
			17	0	17

SIXTH QUARTER

			Class	Lab	Credit
AIB	207	Bank Investments	3	0	3
AIB	220	Bank Management	3	0	3
AIB	232	Corporate Banking	3	0	3
BUS	242	Human Relations in Business	3	0	3
			12	0	12

Total Hours Required for Graduation 96

DIPLOMA IN TRADE AND INDUSTRIAL PROGRAMS IN BROADCASTING—RADIO/TV (V-043)

Purpose of Curriculum

This curriculum is designed to give students the opportunity to acquire basic skills and the related technical information necessary to gain employment and build a profitable career in the nontechnical areas of professional broadcasting.

The program of study is designed to provide the student with knowledge and skills to perform such duties as announcing, advertising sales, copywriting, commercial and program production, news gathering, studio and control room equipment operation, traffic and log maintenance.

PROGRAM INFORMATION

Departmental approval is required for the admission to the Broadcasting Program.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
BUS	101	Beginning Typewriting	2	3	3
ENG	101	Grammar and Composition	5	0	5
RTV	1101	Introduction to Broadcasting	4	3	5
RTV	1111	Broadcast Speech	3	3	4
			14	9	17

SECOND QUARTER

			Class	Lab	Credit
RTV	1121	Broadcast Reading Skills	5	0	5
RTV	1102	Broadcast Announcing & Performance I	4	3	5
RTV	1112	Broadcast Copywriting & Commercial Production	4	3	5
RTV	1122	Radio Programming, Formats & Systems	3	0	3
RTV	1132	Broadcast Operations	1	6	3
			17	12	21

THIRD QUARTER

			Class	Lab	Credit
RTV	1103	Broadcast Announcing & Performance II	4	3	5
RTV	1113	Broadcast Sales & Promotion	3	3	4
RTV	1123	Radio News Gathering, Writing, Announcing	3	3	4
RTV	1133	Broadcast Projects	3	3	4
RTV		Elective (RTV)	2	0	2
			15	12	19

FOURTH QUARTER

			Class	Lab	Credit
PSY	103	Psychology of Human Relations	3	0	3
RTV	1104	Broadcast Practicum	1	18	7
RTV	1114	Broadcast Administration	3	0	3
RTV		Elective (RTV)	2	0	2
			9	18	15

Total Hours Required for Graduation 72

RTV ELECTIVES

RTV	1115	Broadcast Public Affairs	2	0	2
RTV	1125	FCC Rules & Regulations	2	0	2
RTV	1135	Radio Sportscasting	1	3	2
RTV	1145	Independent Study	0	3	1

ASSOCIATE OF APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION/MANAGEMENT (T-018)

Purpose of Curriculum

The Business Administration curriculum is designed to provide the individual with an overview of the business world—its organization and management.

Through study and concentration in areas such as selling, advertising, marketing, banking, finance, credit procedures, data processing, accounting and economics, the individual should be able to enter middle-management occupations in various business and industries such as production marketing, sales and finance.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
BUS	104	Introduction to Business	5	0	5
BUS	111	Business Mathematics	5	0	5
DAP	141	Introduction to COBOL Programming	3	4	5
		*Elective			3
			13	4	18

SECOND QUARTER

			Class	Lab	Credit
BUS	121	Principles of Management	5	0	5
ENG	101	Freshman Grammar & Composition	5	0	5
GEO	204	Economic Geography or	3	0	3
PSY	103	Psychology of Human Relations			
		*Elective			2
			13	0	15

THIRD QUARTER

			Class	Lab	Credit
BUS	107	Office Management	5	0	5
BUS	112	Business Report Writing	5	0	5
		*Elective			7
			10	0	17

FOURTH QUARTER

			Class	Lab	Credit
ACT	201	Principles of Accounting, Int.	5	0	5
BUS	209	Business Law	5	0	5
ECO	201	Principles of Economics	5	0	5
			15	0	15

FIFTH QUARTER

			Class	Lab	Credit
ACT	202	Principles of Accounting	5	0	5
ECO	202	Principles of Economics	5	0	5
		*Elective			8
			10	0	18

SIXTH QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting	3	0	3
BUS	210	Business Law	5	0	5
		*Elective			10
			8	0	18

Total Hours Required for Graduation 101

*Electives - Listed on next page.

ELECTIVES: 25 of the 30 hours of electives must be taken from the following:

ACT	205	Cost Accounting
ACT	206	Income Tax Accounting
ACT	207	Auditing
ACT	208	Managerial Accounting
BUS	108	Beginning Typewriting
BUS	101	Business Communication
BUS	120	Personal Finance
BUS	162	Fundamentals of Real Estate
BUS	163	Fundamentals of Real Estate II
BUS	164	Real Estate Law
BUS	167	Small Business Management
BUS	213	Principles of Finance
BUS	233	Personnel Management
BUS	251	Principles of Insurance
BUS	272	Principles of Supervision
BUS	290	Seminar/Workshop (By Departmental Approval)
BUS	292	Real Estate Appraisal
DAP	142	Advanced COBOL Programming
DAP	171	Introduction to Basic Programming
DAP	172	Advanced Basic Programming
ECO	209	Money and Banking
DMK	101	Retailing
DMK	120	Principles of Marketing
DMK	132	Salesmanship
DMK	151	Principles of Transportation
DMK	152	Traffic Management
DMK	243	Advertising

Associate of Applied Science Degree In Civil Engineering Technology (T-038)

Purpose of Curriculum

The program of study in Civil Engineering Technology is designed to prepare the student for various positions in the construction and transportation fields of engineering. The training received will enable the graduate to perform such duties as estimating, specification writing, surveying, inspection, or supervising with both public and private firms. In addition to having an excellent stock of surveying equipment, the laboratory is equipped with the essential tools to provide the student with a first-hand working knowledge of the properties and testing procedures for various engineering materials. The program also gives training in methods and equipment used in heavy construction and practical applications of construction contracts and specifications.

This two-academic-year curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
CIV	101	Surveying I	3	6	5
DFT	101	Engineering Drawing I	0	6	2
ENG	121	Composition I	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
PSY	111	Industrial Psychology	3	0	3
			14	12	18

SECOND QUARTER

			Class	Lab	Credit
DFT	112	Civil Drafting	0	6	2
EGR	221	Computer Programming	3	3	4
ENG	122	Composition II	3	0	3
MAT	112	Algebra & Trigonometry II	5	0	5
PHY	111	Mechanics	3	3	4
			14	12	18

THIRD QUARTER

			Class	Lab	Credit
CIV	103	Surveying II	3	6	5
EGR	103	Engineering Mechanics	3	3	4
ENG	123	Report Writing	3	3	4
MAT	113	Analytic Geometry & Calculus I	5	0	5
			14	12	18

FOURTH QUARTER

			Class	Lab	Credit
CIV	201	Surveying III	3	3	4
CIV	211	Properties of Engineering Materials	2	3	3
CIV	231	Contracts & Specifications	3	0	3
EGR	201	Strength of Materials	3	3	4
PHY	112	Heat, Sound, & Light	3	3	4
			14	12	18

FIFTH QUARTER

			Class	Lab	Credit
CIV	212	Construction Methods & Equipment	3	3	4
CIV	232	Soils & Foundations	3	3	4
CIV	263	Basic Structural Design	3	3	4
ECO	211	Engineering Economics	3	0	3
PHY	113	Electricity, Magnetism, & Modern Physics	3	3	4
			15	12	19

SIXTH QUARTER

			Class	Lab	Credit
CIV	223	Construction Estimates & Costs	3	3	4
CIV	251	Basic Environmental Technology	3	3	4
CIV	253	Basic Hydrology	2	3	3
CIV	242	Properties of Concrete	3	3	4
ENG	223	Public Speaking	3	0	3
			14	12	18

Total Hours Required for Graduation 109

Associate of Applied Science Degree In Computer Science (T-022)

Purpose of Curriculum

The primary objective of the Computer Science curriculum is to prepare individuals for employment as entry-level programmers. The curriculum includes the study and application of programming languages and techniques, computer systems and concepts, data communications, and accounting. The graduate should be prepared to enter jobs as programmer-trainees and/or entry-level operators. With additional experience and training, the individual should become qualified for positions of programmer manager, system analyst and/or programmer, and data center manager.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DAP	150	Computer Fundamentals	3	2	4
DAP	155	Computer Concepts	5	0	5
DAP	171	Introduction to BASIC Programming	3	4	5
ENG	101	Freshman Grammar and Composition	5	0	5
			18	6	19

SECOND QUARTER

			Class	Lab	Credit
DAP	141	Introduction to COBOL Programming	3	4	5
DAP	172	Advanced BASIC Programming	3	4	5
DAP	261	Assembler Language Programming	3	4	5
			9	12	15

THIRD QUARTER

			Class	Lab	Credit
DAP	142	Advanced COBOL Programming	3	4	5
DAP	181	Introduction to RPG II Programming	3	4	5
DAP	290	Information Management	3	0	3
		Social Science Course			5
			9	8	18

SUMMER QUARTER

			Class	Lab	Credit
* DAP	182	Advanced RPG II Programming	3	4	5
* DAP	263	Introduction of PL/I Programming	3	4	5
			6	8	10

FOURTH QUARTER

			Class	Lab	Credit
ACT	201	Principles of Accounting, Int.	5	0	5
* DAP	182	Advanced RPG II Programming	3	4	5
** DAP	271	Introduction to Computer Applications	1	8	5
MAT	101	College Algebra	5	0	5
			14	12	20

FIFTH QUARTER

			Class	Lab	Credit
ACT	202	Principles of Accounting	5	0	5
ACT	207	Auditing	5	0	5
** DAP	272	Intermediate Computer Applications	1	8	5
DAP	295	Computer Assisted Statistics	3	2	4
			14	10	19

SIXTH QUARTER

			Class	Lab	Credit
* DAP	263	PL/I Programming	3	4	5
** DAP	273	Advanced Computer Applications	1	8	5
DAP	280	Data Communications	3	0	3
		Humanities Course	3	0	3
			10	12	16

Total Hours Required for Graduation 107

*DAP 182 and DAP 263 will be offered during the summer quarter. DAP 182 will be offered again in the Fourth Quarter and DAP 263 again in the Sixth Quarter. Students who intend to select RPG as their language for computer applications DAP 271, DAP 272, and DAP 273 must take the summer offering.

**The computer applications courses are designed to give in-depth experience in writing actual programming applications. The student must choose a language and use it for all three offerings. Should a student change languages, the prior courses in computer applications will have to be repeated.

Associate of Applied Science Degree In Criminal Justice (T-129)

Purpose of Curriculum

The Criminal Justice curriculum is designed to prepare the student for entry into the work force of the Criminal Justice System. It is also designed for those students wishing to continue their education through their junior and senior year in criminal justice, political science, law, etc. The curriculum is well-rounded and includes not only criminal justice courses, but also introductions into the humanities, including English, psychology, sociology, and political science, all of which are vital to one's future in the criminal justice system.

Employment opportunities are available in police agencies, federal enforcement agencies, courts, corrections, probation and parole, juvenile counseling, investigation (public sector and private sector) and private security.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ENG	101	Freshman Grammar and Composition	5	0	5
CJC	101	Introduction to Criminal Justice	5	0	5
CJC	110	Introduction to Criminology	5	0	5
PED		* Elective			1
			15	0	16

SECOND QUARTER

			Class	Lab	Credit
ENG	102	Freshman Literature	5	0	5
CJC	111	Function of the Judicial Process	5	0	5
CJC	115	Criminal Law	5	0	5
PED		*Elective			1
			15	0	16

THIRD QUARTER

			Class	Lab	Credit
ENG	103	Public Speaking	5	0	5
CJC	117	Constitutional Law I	5	0	5
CJC	210	Criminal Investigation	5	0	5
		* Elective			3
			15	0	18

FOURTH QUARTER

			Class	Lab	Credit
PSY	229	Abnormal Psychology	5	0	5
POL	203	State and Local Government	5	0	5
CJC	118	Constitutional Law II	5	0	5
		* Elective			3
			15	0	18

FIFTH QUARTER

			Class	Lab	Credit
CJC	205	Criminal Evidence	5	0	5
SOC	102	Introduction to Sociology	5	0	5
CJC	220	Criminal Justice Organization & Management	5	0	5
		* Elective			3
			15	0	18

SIXTH QUARTER

			Class	Lab	Credit
CJC	211	Introduction to Criminalistics	4	2	5
		* Elective			5
		* Elective			5
			4	2	15

Total Hours Required for Graduation 101

*Electives—Listed on next page.

The student must complete a minimum of 19 elective hours, and may choose from the courses listed below. Courses outside this list must have department approval.

**BIO	101	General Biology
BUS	209	Business Law
CJC	262	Issues in Criminal Justice
ENG	201	English Literature
ENG	203	American Literature
ENG	213	Report Writing
**GEO	101	Physical Geography
**GLY	102	Introduction to Geology
LAW	215	Consumer Law
LAW	120	Family Law
LAW	216	Property Law
**MAT	100	Principles of Math
**MAT	101	College Algebra
**MAT	210	Elementary Statistics
PHL	200	Introduction to Philosophy
PHL	201	Ethics
*PHO	101	Introduction to Photography
POL	108	Nature and Function of Law
POL	110	American Federal Government
PSY	203	Child Psychology
*PSY	201	General Psychology
PSY	204	Adolescent Psychology
SOC	202	Contemporary Social Problems

*Strongly recommended

**Strongly recommended for those students considering transfer


Coors

Certificate Program — Criminal Justice Academy

The basic program for beginning policeman is designed to give training in areas which are most vital to this occupation. Candidates for this course are usually employed by a police department before entry but it is **not** a requirement. The basic 250 hour course is set by The Criminal Justice Standards Division of The Department of Justice.

		Hours
1.	History and Philosophy of Law Enforcement	4
2.	Introduction to Constitutional Law	4
3.	The Criminal Justice System	2
4.	Line-Up and Eyewitness Identification	2
5.	Elements of Criminal Law	20
6.	Interviews: Field and In-Custody	4
7.	Enforcement of Drug Law Violation	4
8.	Vocabulary, Definition and Spelling of Criminal Justice Terminology	3
9.	Field Notetaking and Report Writing	4
10.	Crime Scene Protection and Search Collection and Preservation of Evidence	5
11.	Fingerprinting and Latent Print Search Techniques	4
12.	Police Driver Training	12
13.	Standard First Aid	24
14.	Laws of Arrest, Search and Seizure	16
15.	Defensive Tactics	8
16.	Juvenile Laws	8
17.	A.B.C. Laws	4
18.	Mechanics of Arrest, Detention and Search	3
19.	Police Communications and Informational Systems	4
20.	Handling Abnormal Persons	4
21.	Firearms	24
22.	Civil Disorders	8
23.	Human Relations, Ethics, and Courtesy	8
24.	Criminal Investigations	8
25.	Intervention in Domestic Disturbances	8
26.	Patrol and Crime Prevention Techniques	10
27.	Hazardous Devices, Explosives and Components	3
28.	Hostage Situations	1
29.	Motor Vehicle Law	12
30.	D.U.I. Enforcement	4

31.	Preparing for Court, Testifying in Court		4
32.	Techniques of Traffic Enforcement		4
33.	Traffic Direction and Control		4
34.	Motor Vehicle Accident Investigation		10
35.	Auto Theft		3
		Total Hours	250

Certificate Program — Criminal Justice Academy

The academy takes the basic program required by the Standards Division and expands it, giving more time to certain areas of study, and adding blocks of instruction that are felt to be beneficial to the new officer. The basic 535 hour course is set by The Criminal Justice Standards Division of the Department of Justice and Gaston College.

		Basic Long School Hours
1.	History and Philosophy of Law Enforcement	3
2.	Introduction to Constitutional Law	8
3.	The Criminal Justice System	6
4.	Line-Up and Eyewitness Identification	4
5.	Elements of Criminal Law	20
6.	Interviews: Field and In-Custody	8
7.	Enforcement of Drug Law Violation	8
8.	Vocabulary, Definition and Spelling of Criminal Justice Terminology	8
9.	Field Notetaking and Report Writing	8
10.	Crime Scene Protection and Search Collection and Preservation of Evidence	13
11.	Fingerprinting and Latent Print Search Techniques	8
12.	Police Driver Training	30
13.	Standard First Aid	28
14.	Laws of Arrest, Search and Seizure	16
15.	Defensive Tactics	16
16.	Juvenile Laws	8
17.	A.B.C. Laws	6
18.	Mechanics of Arrest, Detention and Search	3
19.	Police Communications and Informational Systems	8
20.	Handling Abnormal Persons	8
21.	Firearms	30
22.	Civil Disorders	8
23.	Human Relations, Ethics, and Courtesy	12
24.	Criminal Investigations	12
25.	Intervention in Domestic Disturbances	20
26.	Patrol and Crime Prevention Techniques	16
27.	Hazardous Devices, Explosives and Components	8
28.	Hostage Situations	3
29.	Motor Vehicle Law	15
30.	D.U.I. Enforcement	8

31.	Preparing for Court, Testifying in Court	24
32.	Techniques of Traffic Enforcement	6
33.	Traffic Direction and Control	4
34.	Motor Vehicle Accident Investigation	12
35.	Auto Theft	8
*36.	Physical Training	70
*37.	Boxing	8
*38.	Identifying Hazardous Materials	12
*39.	Communicating with Deaf Persons	4
*40.	English	33
	Total Hours	535

*Blocks of instruction added

Diploma In Trade And Industrial Programs In Drafting—Mechanical/Architectural (V-017)

Purpose of Curriculum

This curriculum is designed to prepare students to enter the field of drafting.

Courses are arranged (in sequence) to develop drafting skills and proficiency in mathematics and science. The draftsperson associates with many levels of personnel—administrative, architects, engineers, skilled workers—and must be able to communicate effectively with them.

Job Description

Draftspersons prepare clear, complete, and accurate working plans and detail drawings, from rough or detailed sketches or notes for engineering or manufacturing purposes, according to the specified dimensions. A draftsperson makes final sketch of the proposed drawing, makes charts for representation of statistical data, makes finished designs from sketches, utilizes knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete the drawings.

QUARTER SEQUENCE

(FIRST & SECOND QUARTER SAME FOR ALL STUDENTS)

FIRST QUARTER

			Class	Lab	Credit
DFT	1101	Drafting Fundamentals	3	12	7
ENG	1101	Reading Improvement	2	0	2
MAT	1101	Trade Math I	4	0	4
MEC	1111	Machine Processes I	0	3	1
PHY	1112	Basic Electricity	3	3	4
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
DFT	1102	Precision Drafting	3	12	7
DFT	1132	Architectural Drafting	4	3	5
ENG	1102	Communication Skills	2	0	2
MAT	1102	Trade Math II	4	0	4
PSY	1102	Human Relations	2	0	2
			15	15	20

THIRD QUARTER

			Class	Lab	Credit
DFT	1103	Specialized Drafting	3	12	7
DFT	1113	Descriptive Geometry	1	3	2
DFT	1163	Construction Estimating	1	3	2
DFT	1153	Architectural Materials & Supplies	3	0	3
MAT	1103	Algebra and Trigonometry	4	0	4
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
DFT	1104	Advanced Drafting	3	9	6
DFT	1124	Technical Illustration	1	3	2
DFT	1134	Building Codes and Laws	0	3	1
DFT	1144	Electronics and Drafting	2	3	3
PHY	1111	Basic Mechanics	3	3	4
			9	21	16

(MECHANICAL DRAFTING)
THIRD QUARTER

			Class	Lab	Credit
DFT	1103	Specialized Drafting	3	12	7
DFT	1113	Descriptive Geometry	1	3	2
DFT	1143	Drafting Devices & Techniques	0	3	1
MAT	1103	Algebra and Trigonometry	4	0	4
MEC	1123	Structure of Metals	4	0	4
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
DFT	1104	Advanced Drafting	3	9	6
DFT	1124	Technical Illustration	1	3	2
DFT	1144	Electronics and Drafting	2	3	3
MEC	1112	Machine Processes II	0	3	1
PHY	1111	Basic Mechanics	3	3	4
			9	21	16

Total Hours Required for Graduation 72

Diploma In Trade And Industrial Programs in Diesel Vehicle Maintenance (V-013)

Purpose of Curriculum

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect; diagnose, repair or adjust diesel powered equipment. Manual skills are developed in practical shop work. Through understanding of the operating principles involved in the modern internal combustion engine, chassis, suspension, and power trains comes in class assignments, discussion, and shop practice.

PROGRAM INFORMATION

Prerequisite: Completion of V-003 or approval for experience by the department chairperson.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DSE	1101	Diesel Engines	3	12	7
DSE	1111	Diesel Fuels	3	6	5
ENG	1101	Reading Improvement	2	0	2
MAT	1101	Trade Math I	4	0	4
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
DSE	1102	Electrical Systems	3	6	5
PHY	1122	Hydraulics & Pneumatics	3	3	4
PHY	1112	Basic Electricity	3	3	4
DSE	1132	Braking Systems	1	6	3
PSY	1102	Human Relations	2	0	2
			12	18	18

THIRD QUARTER

			Class	Lab	Credit
DSE	1103	Power Trains I	3	6	5
DSE	1113	Chassis & Suspension	3	3	4
WLD	1163	Gas & Arc Welding	2	3	3
DSE	1143	Hydraulic & Pneumatic Systems	3	3	4
DFT	1173	Schematics & Diagrams	1	3	2
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
DSE	1104	Power Trains II	3	6	5
DSE	1114	Diesel Servicing	3	9	6
BUS	1104	Small Business Management	3	0	3
DSE	1124	Air Conditioning System	3	3	4
			12	18	18

Total Hours Required for Graduation 72

Associate Of Applied Science Degree In Early Childhood Associate (T-073)

Purpose of Curriculum

The Early Childhood Associate curriculum is designed to prepare individuals to work with programs and/or centers concerned with the care and development of infants and younger children. Through study and application in such areas as the developmental stages of children, physical and nutritional needs of children, communication techniques to use with children and care and guidance of children in the home, the individual will be able to function effectively in various programs and/or centers dealing with pre-school 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.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
EDU	101	Introduction to Early Childhood Education	4	2	5
EDU	113	The Behavior of Children	4	2	5
ENG	101	Freshman Grammar & Composition	5	0	5
MUS	134	Class Piano	0	2	1
			13	6	16

SECOND QUARTER

			Class	Lab	Credit
EDU	207	Music in Early Childhood Program	4	2	5
ENG	102	Freshman Literature	5	0	5
		Elective(s)	8	0	8
			17	2	18

THIRD QUARTER

			Class	Lab	Credit
EDU	116	Communicating with the Young Child	4	2	5
ENG	103	Public Speaking	5	0	5
PED	230	First Aid	3	0	3
RDG	101	Reading Improvement	5	0	5
			17	2	18

FOURTH QUARTER

			Class	Lab	Credit
EDU	211	Science in the Early Childhood Program	4	2	5
PSY	201	General Psychology	5	0	5
SOC	103	Marriage and Family Relations	3	0	3
		Elective	5	0	5
			17	2	18

FIFTH QUARTER

			Class	Lab	Credit
EDU	106	Practicum: Early Childhood Education	1	4	3
EDU	114	Health and Safety for Young Children	2	2	3
EDU	208	Art in the Early Childhood Program	4	2	5
PED	270	Motor Development & Movement in Early Childhood	4	2	5
			11	10	16

SIXTH QUARTER

			Class	Lab	Credit
EDU	212	Mathematics for Young Children	4	2	5
PSY	203	Child Psychology	5	0	5
		Elective(s)	5	0	5
			14	2	15

Total Hours Required for Graduation 101

Associate Of Applied Science Degree In Electrical Engineering Technology (T-044)

Purpose of Curriculum

The program of study in Electrical Engineering Technology prepares the engineering technician to perform such duties as engineering sales, supervision of installations, and electrical contracting. The student receives instruction that will enable him to assist the electrical engineer in the design of power, lighting, and control systems.

This program also provides the student with a knowledge of the current electrical practice in the commercial, residential, utility, and industrial fields on as wide a basis as may be completed in a two-year course.

This two-academic-year curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DFT	101	Engineering Drawing I	0	6	2
ELC	101	Electrical Fundamentals	3	3	4
ENG	121	Composition I	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
PSY	111	Industrial Psychology	3	0	3
			14	9	17

SECOND QUARTER

			Class	Lab	Credit
DFT	122	Electrical Drawing	0	3	1
ELC	102	Direct-Current Circuits	3	3	4
ELC	122	Techniques of Fabrication	0	3	1
ENG	122	Composition II	3	0	3
MAT	112	Algebra & Trigonometry II	5	0	5
PHY	113	Electricity, Magnetism, & Modern Physics	3	3	4
			14	12	18

THIRD QUARTER

			Class	Lab	Credit
ELC	103	Alternating-Current Circuits	3	3	4
ELN	103	Electronics I	2	3	3
ENG	123	Report Writing	3	3	4
MAT	113	Analytic Geometry & Calculus I	5	0	5
PHY	111	Mechanics	3	3	4
			16	12	20

FOURTH QUARTER

			Class	Lab	Credit
ELC	221	Electrical Machines	3	3	4
ELC	242	Illumination	2	3	3
ELN	201	Electrical Circuits I	3	0	3
ELN	211	Electronics II	3	3	4
PHY	112	Heat, Sound, & Light	3	3	4
			14	12	18

FIFTH QUARTER

			Class	Lab	Credit
ECO	211	Engineering Economics	3	0	3
EGR	221	Computer Programming	3	3	4
ELC	222	Alternating-Current Machinery	3	3	4
ELC	253	Power Systems I	2	3	3
ELN	202	Electrical Circuits II	3	0	3
			14	9	17

SIXTH QUARTER

			Class	Lab	Credit
ELC	223	Electrical Control Systems	3	3	4
ELC	241	Codes and Specifications	2	3	3
ELC	262	Power Systems II	3	3	4
ENG	223	Public Speaking	3	0	3
MEC	233	Industrial Instrumentation	3	3	4
			14	12	18

Total Hours Required for Graduation 108

Diploma In Industrial And Trade Programs In Electrical Installation And Maintenance (V-018)

Purpose of Curriculum

This curriculum will provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and shop instruction which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

Job Description

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

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ELC	1101	D.C. Circuits	7	6	9
ELC	1151	Residential Wiring Methods	3	12	7
ENG	1101	Reading Improvement	2	0	2
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
ELC	1102	A.C. Circuits	3	12	7
ELC	1175	Electrical Codes & Estimates	3	6	5
ENG	1102	Communication Skills	2	0	2
MAT	1112	Electrical Math	4	0	4
			12	18	18

THIRD QUARTER

			Class	Lab	Credit
ELC	1155	A.C. & D.C. Machines	4	9	7
ELC	1143	Electrical Controls	3	6	5
PSY	1102	Human Relations	2	0	2
ELC	1174	Power Distribution	3	3	4
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
ELC	1144	Commercial Wiring	3	6	5
ELC	1134	Industrial Wiring	6	9	9
ELC	1184	Industrial Electronics	3	3	4
			12	18	18

Total Hours Required for Graduation 72

Associate Of Applied Science Degree In Electronics Engineering Technology (T-045)

Purpose of Curriculum

The program of study in Electronics Engineering Technology is designed to provide the student with a thorough background in the basic studies and sciences and to provide him with the essential specialized courses in the electronics area. Emphasis is upon the broad area of electronics endeavor. Modern laboratory equipment provides for a comprehensive treatment of advanced electronics instrumentation. Graduates are employed in manufacturing, production, testing, inspection, promotion, and sale of electronic equipment and systems.

There is a bright future for the Electronics Engineering Technology graduate in the building, installation, and maintenance of the electric devices that are now considered essential to so many phases of our industrial society.

This two-academic-year curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DFT	101	Engineering Drawing I	0	6	2
ELC	101	Electrical Fundamentals	3	3	4
ENG	121	Composition I	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
PSY	111	Industrial Psychology	3	0	3
			14	9	17

SECOND QUARTER

			Class	Lab	Credit
DFT	122	Electrical Drawing	0	3	1
ELC	102	Direct-Current Circuits	3	3	4
ELC	122	Techniques of Fabrication	0	3	1
ENG	122	Composition II	3	0	3
MAT	112	Algebra & Trigonometry II	5	0	5
PHY	113	Electricity, Magnetism & Modern Physics	3	3	4
			14	12	18

THIRD QUARTER

			Class	Lab	Credit
ELC	103	Alternating-Current Circuits	3	3	4
ELN	103	Electronics I	2	3	3
ENG	123	Report Writing	3	3	4
MAT	113	Analytic Geometry & Calculus I	5	0	5
PHY	111	Mechanics	3	3	4
			16	12	20

FOURTH QUARTER

			Class	Lab	Credit
ELC	221	Electrical Machines	3	3	4
ELN	201	Electrical Circuits I	3	0	3
ELN	211	Electronics II	3	3	4
ELN	241	Digital Principles	2	3	3
PHY	112	Heat, Sound, & Light	3	3	4
			14	12	18

FIFTH QUARTER

			Class	Lab	Credit
ECO	211	Engineering Economics	3	0	3
EGR	221	Computer Programming	3	3	4
ELN	202	Electrical Circuits II	3	0	3
ELN	212	Electronics III	3	3	4
ELN	242	Microprocessors I	3	3	4
			15	9	18

SIXTH QUARTER

			Class	Lab	Credit
ENG	223	Public Speaking	3	0	3
ELN	213	Electronics IV	3	3	4
ELN	243	Microprocessors II	3	3	4
ELN	253	Communications Circuits	3	3	4
ELN	283	Integrated Circuits	2	3	3
			14	12	18

Total Hours Required for Graduation 109

Diploma In Trade And Industrial Programs in Electronics Servicing/ Industrial Electronics (V-042)

Purpose of Curriculum

This curriculum is designed to provide the basic knowledge and skills involved in the installation, maintenance and servicing of radio, television, computers, and other electronic control systems. A large portion of time is spent in the laboratory verifying electronic principals and developing servicing techniques.

Job Description

A radio and television serviceman may be required to install, maintain, and service amplitude modulated and frequency modulated home and auto radios, transistorized radios, monochrome and color television sets, intercommunication, public address and paging systems, high fidelity and stereophonic amplifiers, record players and tape recorders.

His work will require meeting the public both in the repair shop and on service calls. A serviceman who establishes his own business will also need to know how to maintain business records and inventory.

The Industrial Electronics serviceman may be required to install, maintain, and service computers, motor control units, multi-purpose control panels for assembly line process control, and automated assembly line equipment.

Many employment opportunities exist in a variety of related fields in various modern industries. A knowledge of the fundamental principles of electricity and electronics as related to Industrial Electronics coupled with skills in diagnosis and troubleshooting will provide the basics for employment. Most of the jobs exist in the automation equipment manufacturing industry, sales, and field maintenance of automated equipment.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ELN	1121	D.C. Circuits	7	6	9
ELN	1111	Electronic Instruments & Measurement	3	12	7
ENG	1101	Reading Improvement	2	0	2
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
ELN	1102	A.C. Circuits	3	12	7
DFT	1183	Printed Circuits and Soldering	3	6	5
ENG	1102	Communication Skills	2	0	2
MAT	1112	Electrical Math	4	0	4
			12	18	18

THIRD QUARTER

			Class	Lab	Credit
ELN	1143	Introduction to Semiconductors	3	12	7
ELN	1133	Power Supplies and Amplifiers	4	3	5
PSY	1102	Human Relations	2	0	2
ELN	1112	Trouble-Shooting Techniques I	0	3	1
ELN	1163	Introduction to Digital Logic	3	0	3
			12	18	18

FOURTH QUARTER

			Class	Lab	Credit
ELN	1144	Special Semiconductors & Microelectronics	3	12	7
ELN	1154	Oscillators Pulse Circuits & Modulation	6	3	7
ELN	1164	Trouble-Shooting Techniques II	0	3	1
ELN	1174	Digital Techniques	3	0	3
			12	18	18

Total Hours Required for Graduation 72

Associate Of Applied Science Degree In Fashion Merchandising And Marketing Technology (T-143)

Purpose of Curriculum

The Fashion Merchandising and Marketing Technology curriculum is designed to provide individuals with fundamental skills in fashion and merchandising activities. Employment opportunities are available in the surrounding areas in retailing, manufacturing, and wholesaling.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DMK	102	Fundamentals of Fashion Merchandising	5	0	5
BUS	111	Business Math	5	0	5
DMK	105	Personal Development or PED 210	3	0	3
ART	---	Elective	3	0	3
		Elective			3
					19

SECOND QUARTER

			Class	Lab	Credit
DMK	204	Fashion Design	3	0	3
BUS	104	Introduction to Business	5	0	5
ENG	101	Freshman Grammar and Composition	5	0	5
BUS	101	Beginning Typing	2	3	3
		Elective			3
					19

THIRD QUARTER

			Class	Lab	Credit
DMK	109	The History and Psychology of Dress	5	0	5
ENG	103	Public Speaking	5	0	5
DMK	132	Salesmanship	5	0	5
		Elective			3
					18

FOURTH QUARTER

			Class	Lab	Credit
DMK	120	Principles of Marketing	5	0	5
BUS	242	Human Relations in Business	3	0	3
ECO	201	Principles of Economics	5	0	5
		Elective			3
					16

FIFTH QUARTER

			Class	Lab	Credit
DMK	211	Fashion Show Production	5	0	5
BUS	121	Principles of Management	5	0	5
		Elective			5
		Elective			3
					18

SIXTH QUARTER

			Class	Lab	Credit
DMK	260	Visual Presentation	3	0	3
DMK	101	Retailing	5	0	5
DAP	150	Computer Fundamentals	3	2	4
		Elective			3
					15
		Total Hours Required for Graduation			105

Students may select 23 hours of electives from the following courses and/or may choose to concentrate in any one of the areas listed on the following page.

Areas of Concentration:

Art		
ART	114	Commercial Art Fundamentals
ART	115	Commercial Art Design
ART	131	Drawing I
ART	132	Drawing II
ART	133	Figure Drawing
DMK	215	New York Field Studies Seminar
Management		
BUS	233	Personnel Management
BUS	272	Principles of Supervision
BUS	167	Small Business Management
BUS	107	Office Management
BUS	209	Business Law
BUS	108	Business Communications
DMK	215	New York Field Studies Seminar
Drama		
DRA	101	Introduction to Theatre
DRA	104	Play Production I
DRA	105	Play Production II
DRA	107	Stage Make-up
DRA	206	Costuming for the Stage
DMK	215	New York Field Studies Seminar
Accounting		
ACT	201	Principles of Accounting; Introduction
ACT	202	Principles of Accounting
BUS	213	Principles of Finance
ACT	200	Payroll Accounting
ACT	205	Cost Accounting
DMK	215	New York Field Studies Seminar

**Students may also select electives from the following courses with departmental approval:

PSY	100	Individual Human Potential
PSY	201	General Psychology
SOC	102	Introduction to Sociology
SOC	202	Contemporary Social Problems
SOC	218	Group Dynamics
BUS	120	Personal Finance
BUS	112	Business Report Writing
ENG	102	Freshman Literature
		*Math for Retail Buying
BIO	101	General Biology
*DAP	155	Computer Concepts
*DAP	171	Introduction to Basic Programming
DMK	243	Advertising
ENG	201	English Literature
ENG	203	American Literature
*LAW	215	Consumer Law
MAT	101	College Algebra
*MAT	210	Elementary Statistics

*Highly recommended

Associate Of Applied Science Degree In Fire Science (T-063)

Purpose of Curriculum

The Fire Science curriculum is designed to enable the individual to draw from a vast store of technical and professional knowledge in making effective decisions concerning fire protection. Through technical education and experience, the individual acquires specialized knowledge in this vital field of public service and develops specific competencies for the performance of fire protection administrative and supervisory duties. The curriculum includes areas such as the undersanding of fire hazards and their control, and general courses that prepare one to work with people harmoniously.

Opportunities exist for the individual with adequate training and ability. Students seeking gainful employment may be hired by governmental agencies, industrial firms, educational organizations and insurance rating organizations as Fire Chiefs, Fire Marshals, inspectors, investigators, instructors, etc. Employed persons should have opportunities for positions requiring increased skill and responsibility as they increase their job competence.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ENG	121	Composition I	3	0	3
FIP	101	Introduction to Fire Protection Hazards	3	0	3
FIP	115	Fire Prevention Programs	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
PHY	101	Physics: Properties of Matter	3	2	4
			17	2	18

SECOND QUARTER

			Class	Lab	Credit
BUS	272	Principles of Supervision	3	0	3
ENG	122	Composition II	3	0	3
FIP	102	Municipal Fire Protection	3	0	3
FIP	211	Grading of Fire Defenses	3	0	3
PSY	103	Psychology of Human Relations	3	0	3
			15	0	15

THIRD QUARTER

			Class	Lab	Credit
DFT	136	Drafting & Blueprint Interpretation**	0	6	2
ENG	223	Public Speaking	3	0	3
FIP	105	Applied Electricity for Fire Protection	3	2	4
FIP	120	Municipal Finance	5	0	5
FIP	135	Training Programs & Methods of Instruction	3	0	3
			14	8	17

FOURTH QUARTER

			Class	Lab	Credit
CHM	100	Introduction to Chemical Concepts	3	0	3
ENG	123	Report Writing	3	3	4
FIP	103	Construction Codes and Material Rating	2	2	3
FIP	201	Fire Detection & Investigation	3	0	3
FIP	230	Hydraulics & Water Distribution Systems	3	2	4
			14	7	17

FIFTH QUARTER

			Class	Lab	Credit
FIP	208	Municipal Public Relations	3	0	3
FIP	218	Chemistry of Hazardous Materials	3	2	4
FIP	220	Fire Fighting Strategy	3	2	4
FIP	231	Sprinkler & Standpipe Systems	3	2	4
		Social Studies Elective	3	0	3
		Technical Elective	3	0	3
			18	6	21

SIXTH QUARTER

			Class	Lab	Credit
BUS	233	Personnel Management	3	0	3
FIP	225	Fire Protection Law	3	0	3
FIP	226	Industrial Safety	3	0	3
FIP	235	Inspection Principles & Practices	3	4	5
FIP	245	Automatic Alarm & Extinguishing Systems	3	2	4
			15	6	18

Total Hours Required for Graduation 106

Diploma In General Office (Technical Specialty) (T-165)

Purpose of Curriculum

A diploma program designed to provide the basic clerical skills necessary for general office work. This program can be especially useful to those individuals who want to reenter the job market or to those who wish to obtain skills for first-time employment.

Program Information

Any student who enters this program other than the Fall Quarter, please see the chairman of the Secretarial Sciences Department before registering.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
*BUS	101	Beginning Typewriting	2	3	3
BUS	104	Introduction to Business	5	0	5
BUS	111	Business Mathematics	5	0	5
ENG	101	Freshman Grammar and Composition	5	0	5
DMK	105	Personal Development	3	0	3

SECOND QUARTER

			Class	Lab	Credit
BUS	102	Intermediate Typewriting	2	3	3
BUS	108	Business Communications	5	0	5
BUS	120	Personal Finance	5	0	5
BUS	242	Human Relations in Business	3	0	3
		Elective			2

THIRD QUARTER

			Class	Lab	Credit
ACT	101	Secretarial Accounting (Payroll Option) or	5	0	5
BUS	165	Speedwriting I (Clerical Option)	5	0	5
BUS	103	Advanced Typewriting	2	3	3
BUS	208	Word Processing (Prerequisite ENG 101 and BUS 102)	2	3	3
DAP	150	Computer Fundamentals	3	2	4
		Elective (Payroll Option)			3
		Elective (Clerical Option)			1

FOURTH QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting (Payroll Option) or	3	0	3
BUS	166	Speedwriting II (Clerical Option)	5	0	5
BUS	109	Secretarial Practice	2	3	3
BUS	209	Business Law	5	0	5
ENG	103	Public Speaking	5	0	5

Total Hours Required for Graduation 73

*Students who have taken typewriting in high school may, with permission of the department chairman, omit BUS 101. Another course must be substituted for one omitted.

**Students may substitute BUS 201 and BUS 202 for BUS 165 and BUS 166 with permission of the department chairperson.

General Studies (C-011)

Purpose of Curriculum

General Studies is a Liberal Arts Program designed to offer college transfer courses to students desirous of college success via close supervision, and career guidance. Though open to all officially enrolled Gaston College students, General Studies is especially designed as:

1. A second progression for students who have successfully completed developmental courses.
2. An entry program for students who score in the high-low to low-medium range on the ACT and/or SAT.
3. An entry program for students who have been out of school for an extended period of time.
4. An entry program for students who are unsure of their career plans.
5. An entry program for students who want to ease into the rigors of college academia.

Once enrolled in the General Studies Program, students are encouraged to commit themselves for one full school year (3 quarters). At the end of that period, they may opt to continue their studies to earn a two-year degree, transfer to another division, or transfer to another institution.

Institutional and transfer courses will be offered in communications, math, and social science (Western Civilization). At the end of three quarters, the successful student will have earned enough credits to be classified as a sophomore.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
COM	101	Communications	5	0	5
MAT	100	Principles of Mathematics	5	0	5
PSY	100	Individual Human Potential	2	0	2
SSC	101	Social Science (Ancient Civilization)	5	0	5
			17	0	17

SECOND QUARTER

			Class	Lab	Credit
COM	100	Communications	5	0	5
MAT	101	College Algebra	5	0	5
SSC	102	Social Science (Medieval Civilization)	5	0	5
		*Elective	3	0	3
			18	0	18

THIRD QUARTER

			Class	Lab	Credit
COM	102	Communications	5	0	5
MAT	102	Topics in Mathematics	5	0	5
SSC	103	Social Science (Modern and Contemporary Civilization)	5	0	5
		*Elective	3	0	3
			18	0	18

*Electives should be from the following: ART 101, MUS 101, or PED courses.

Credits earned in General Studies may be interpreted as follows:

COURSE	EQUIVALENT
COM 101	RDG 101
COM 102	ENG 101
SSC 101	HIS 101
SSC 102	HIS 102
SSC 103	HIS 103

General Studies are scheduled for four hour per day, five days a week, for nine months.

Associate Of Applied Science Degree In Industrial Engineering Technology (T-047)

Purpose of Curriculum

The program of study in Industrial Engineering Technology has as its objective the preparation of engineering technicians to assist the engineer in the performance of industrial engineering functions. The balanced program provides a thorough background in drawing, English, mathematics, physics, and mechanical engineering technology, with specialization in subject matter area such as materials handling, plant layout, industrial organization and management, systems design, production planning and control, motion and time study, and quality control.

The graduate is prepared to readily assume supervisory responsibilities in these areas of activity with all types of industrial concerns, both large and small.

This two-academic-year curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DFT	101	Engineering Drawing I	0	6	2
ENG	121	Composition I	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
MEC	101	Production Technology I	3	3	4
PSY	111	Industrial Psychology	3	0	3
			14	9	17

SECOND QUARTER

			Class	Lab	Credit
DFT	102	Engineering Drawing II	0	6	2
ENG	122	Composition II	3	0	3
MAT	112	Algebra & Trigonometry II	5	0	5
MEC	102	Production Technology II	3	3	4
PHY	111	Mechanics	3	3	4
			14	12	18

THIRD QUARTER

			Class	Lab	Credit
ENG	123	Report Writing	3	3	4
ISC	103	Plant Layout & Materials Handling	0	6	2
MAT	113	Analytic Geometry & Calculus I	5	0	5
MEC	103	Physical Metallurgy	3	3	4
PHY	112	Heat, Sound, & Light	3	3	4
			14	15	19

FOURTH QUARTER

			Class	Lab	Credit
EGR	221	Computer Programming	3	3	4
ISC	201	Production Planning	3	0	3
ISC	211	Industrial Safety	0	3	1
MEC	201	Jig & Fixture Design	2	3	3
MEC	252	Fundamentals of Mechanical Design	3	0	3
PHY	113	Electricity, Magnetism, & Modern Physics	3	3	4
			14	12	18

FIFTH QUARTER

			Class	Lab	Credit
ECO	211	Engineering Economics	3	0	3
ELC	282	Electric Circuits & Machines	3	3	4
ISC	202	Industrial Systems	3	3	4
ISC	212	Profit Improvement	3	3	4
ISC	222	Methods Analysis	2	3	3
			14	12	18

SIXTH QUARTER

			Class	Lab	Credit
ENG	223	Public Speaking	3	0	3
ISC	213	Statistics & Quality Control	3	3	4
ISC	223	Work Measurement	2	6	4
ISC	233	Industrial Organization & Management	3	0	3
MEC	233	Industrial Instrumentation	3	3	4
			14	12	18

Total Hours Required for Graduation 108

Associate Of Applied Science Degree In Industrial Management Technology (T-059)

Purpose of Curriculum

Industry's needs in positions of supervision and mid-management have grown extensively with the development of new methods of manufacturing and with the increase in the national economy. This need has added emphasis to the necessity for well-trained individuals that can understand new methods and keep abreast of trends in the economy. The supervisor and persons in mid-management must be concerned daily with human behavior and the psychological factors which affect personnel working under their direction. They must also be conscious of the responsibilities of their position toward the total economic well being of the industry.

The program is prepared to develop the individuals' abilities in the art of communicating with his fellow worker by providing him with the training in business and industrial management, psychology, production methods, and the general and social education that broadens one's perspective. This training should provide one with the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities that go with supervisory and mid-management positions in industry.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
BUS	104	Introduction to Business	5	0	5
BUS	111	Business Mathematics	5	0	5
ENG	121	Composition I	3	0	3
GEO	204	Economic Geography	3	0	3
PSY	111	Industrial Psychology	3	0	3
			19	0	19

SECOND QUARTER

			Class	Lab	Credit
ACT	201	Principles of Accounting, Introductory	5	0	5
BUS	209	Business Law	5	0	5
ENG	122	Composition II	3	0	3
ISC	102	Principles of Industrial Management	5	0	5

THIRD QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting	3	0	3
BUS	219	Marketing	5	0	5
ENG	123	Report Writing	3	3	4
ISC	103	Plant Layout & Materials Handling	0	6	2
ISC	113	Industrial Safety	3	0	3
			14	9	17

FOURTH QUARTER

			Class	Lab	Credit
ANT	204	General Cultural Anthropology	5	0	5
ECO	201	Principles of Economics	5	0	5
ISC	201	Production Planning	3	0	3
PHY	101	Physics: Properties of Matter	3	3	4
			16	3	17

FIFTH QUARTER

			Class	Lab	Credit
EGR	221	Computer Programming	3	3	4
ISC	212	Profit Improvement	3	3	4
ISC	222	Methods Analysis	2	3	3
PED	230	First Aid	3	0	3
SOC	102	Introductory Sociology	5	0	5
			16	9	19

SIXTH QUARTER

			Class	Lab	Credit
ENG	223	Public Speaking	3	0	3
ISC	233	Industrial Organization & Management	3	0	3
ISC	203	Essentials of Work Measurement	2	3	3
ISC	243	Quality Control	3	3	4
ISC	253	Management Problems	5	0	5
			16	6	18

Total Hours Required for Graduation 108

Diploma In Trade And Industrial Programs In Machinist (V-032)

Purpose of Curriculum

This curriculum is designed to give students the opportunity to acquire basic skills and the related technical information necessary to gain employment and build a profitable career in the machine shop industry in the state.

Job Description

The machinist is a skilled metal worker who shapes metal parts by using machine tools and hand tools. The training and experience enables one to plan and carry through all operations needed in turning out a machined product and to switch readily from one kind of product to another. Standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining are made. Precision measuring instruments jsuch as micrometers and gauges to measure the accuracy of work to thousandths of an inch are used.

The skilled worker must be able to set up and operate most types of machine tools. The machinist must also know the composition of metal. The machinist's knowledge enables one to turn a block of metal into an intricate, precise art.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ENG	1101	Reading Improvement	2	0	2
MAT	1101	Trade Math I	4	0	4
MEC	1101	Machine Tool Fundamentals	3	12	7
MEC	1121	Machinist Drafting	4	5	6
			13	17	19

SECOND QUARTER

			Class	Lab	Credit
ENG	1102	Communication Skills	0	2	2
MAT	1153	Machinist Mathematics	4	0	4
MEC	1102	Machine Operations and Setups	3	12	7
MEC	1114	Metals	2	4	4
WLD	1111	Gas Welding Fundamentals	0	3	1
			9	21	18

THIRD QUARTER

			Class	Lab	Credit
MAT	1103	Algebra and Trigonometry	4	0	4
MEC	1103	Machine Tool Operations	3	12	7
MEC	1133	Specialized Machine Operations	3	2	4
PHY	1111	Basic Mechanics	3	3	4
			13	17	19

FOURTH QUARTER

			Class	Lab	Credit
MEC	1104	Advanced Machine Shop	3	12	7
MEC	1154	Blueprint Reading for Machinist	1	3	2
PHY	1112	Basic Electricity	3	3	4
PSY	1102	Human Relations	2	0	2
WLD	1112	Arc Welding Fundamentals	0	3	1
			9	21	16

Total Hours Required for Graduation 72

Associate Of Applied Science Degree in Mechanical and Production Engineering Technology (T-051)

Purpose of Curriculum

The program of study in Mechanical and Production Engineering Technology has as its objective the training of personnel to assist the manager or the small industry in the planning of production processes and equipment, tooling, supervision of personnel, production of material goods, product and tool design, sales, and drafting. A study of the second-year courses will show a wide range of endeavor to familiarize the student with every phase of these processes.

The versatility of the mechanical and production technician results in a demand for the graduate in all types of industry.

This two-academic-year curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DFT	101	Engineering Drawing I	0	6	2
ENG	121	Composition I	3	0	3
MAT	111	Algebra & Trigonometry I	5	0	5
MEC	101	Production Technology I	3	3	4
PSY	111	Industrial Psychology	3	0	3
			14	9	17

SECOND QUARTER

			Class	Lab	Credit
DFT	102	Engineering Drawing II	0	6	2
ENG	122	Composition II	3	0	3
MAT	112	Algebra & Trigonometry II	5	0	5
MEC	102	Production Technology II	3	3	4
PHY	111	Mechanics	3	3	4
			14	12	18

THIRD QUARTER

			Class	Lab	Credit
ENG	123	Report Writing	3	3	4
ISC	103	Plant Layout & Materials Handling	0	6	2
MAT	113	Analytic Geometry & Calculus I	5	0	5
MEC	103	Physical Metallurgy	3	3	4
PHY	112	Heat, Sound, & Light	3	3	4
			14	15	19

FOURTH QUARTER

			Class	Lab	Credit
EGR	103	Engineering Mechanics	3	3	4
EGR	221	Computer Programming	3	3	4
MEC	201	Jig & Fixture Design	2	3	3
MEC	232	Thermodynamics	3	0	3
PHY	113	Electricity, Magnetism, & Modern Physics	3	3	4
			14	12	18

FIFTH QUARTER

			Class	Lab	Credit
ECO	211	Engineering Economics	3	0	3
EGR	201	Strength of Materials	3	3	4
ELC	282	Electric Circuits & Machines	3	3	4
ISC	222	Methods Analysis	2	3	3
MEC	222	Machine Design I	3	3	4
			14	12	18

SIXTH QUARTER

			Class	Lab	Credit
ENG	223	Public Speaking	3	0	3
ISC	213	Statistics & Quality Control	3	3	4
MEC	203	Tool & Die Design	2	3	3
MEC	223	Machine Design II	3	3	4
MEC	233	Industrial Instrumentation	3	3	4
			14	12	18

Total Hours Required for Graduation 108

Associate Of Applied Science Degree In Medical Office Assistant Grade II (T-058)

Purpose of Curriculum

The Medical Office Assistant curriculum is designed to prepare the individual to perform a variety of administrative and clinical tasks under the supervision of a physician. This program provides a foundation of knowledge from the humanities and the biological and social sciences, with clinical experiences in procedures and bookkeeping and insurance in qualified physicians' offices or accredited hospitals. The ability to perform clinical tests under the supervision of the physician distinguishes the medical assistant from the medical secretary.

A minimum grade of "C" (80%) in each medical office assistant course is required to pass each course and to remain in the program. Readmission will be considered on an individual and space available basis.

A grade of "CE" will not be accepted for BUS 102. A medical office assistant student must earn a minimum grade of "C" in BUS 102 or repeat the course.

A medical office assistant student must have completed all related courses, with the exception of DAP 150, prior to entering the sixth quarter of the program.

PROGRAM INFORMATION

In addition to meeting the college admission requirements, applicants to the Medical Office Assistant Program must meet the following criteria:

1. Attain a minimum composite score of 12 on the ACT examination.
2. Submit a satisfactory physical examination report. (Current within six months prior to entry).
3. Schedule a personal interview with the program director.
4. Successfully complete (with a minimum grade of "C") either one year of high school typing or one quearter of college level beginning typing, prior to being accepted into the program.

Health Career Program enrollments are limited. Applicants are advised to apply early.

QUARTER SEQUENCE

MEDICAL OFFICE ASSISTANT GRADE II

FIRST QUARTER

			Class	Lab	Credit
BIO	121	Anatomy and Physiology I	3	2	4
BUS	102	Intermediate Typewriting	2	3	3
ENG	101	Freshman Grammar and Composition	5	0	5
MOA	100	Medical Terminology and Vocabulary I	3	0	3
MOA	103	Orientation to Medical Office Assisting	3	0	3
			16	5	18

SECOND QUARTER

			Class	Lab	Credit
BIO	122	Anatomy and Physiology II	3	2	4
BUS	111	Business Mathematics	5	0	5
MOA	101	Medical Terminology and Vocabulary II	3	0	3
MOA	105	Interpersonal Relationships	3	0	3
PSY	201	General Psychology	5	0	5
			19	2	20

THIRD QUARTER

			Class	Lab	Credit
ACT	101	Secretarial Accounting	5	0	5
ENG	103	Public Speaking	5	0	5
MOA	102	Medical Terminology and Vocabulary III	3	0	3
MOA	110	Medical Law, Ethics, & Economics	3	0	3
MOA	200	Medical Office Assisting I	2	6	4
			18	6	20

FOURTH QUARTER

			Class	Lab	Credit
MOA	201	Medical Office Assisting II	3	6	5
MOA	206	Laboratory Orientation I	2	6	4
MOA	211	Medical Transcription	3	2	4
MOA	220	MOA Administrative I	2	4	4
			10	18	17

MEDICAL OFFICE ASSISTANT GRADE II

FIFTH QUARTER

			Class	Lab	Credit
MOA	202	Medical Office Assisting III	3	6	5
MOA	207	Laboratory Orientation II	3	6	5
MOA	221	MOA Administrative II	2	4	4
			8	16	14

SIXTH QUARTER

			Class	Lab	Credit
DAP	150	Computer Fundamentals	3	2	4
MOA	208	Medical Office Practicum	0	20	2
MOA	210	Medical Office Assisting Seminar	6	0	6
			9	22	12

Total Hours Required for Graduation 101

Associate of Applied Science Degree In Museum Technology (T-162)

Purpose of Curriculum

Museum Technology is a two-year program designed to provide education and experience training for candidates who would be qualified to fill mid-level positions on the staffs of museums and related institutions.

These positions would include: administrative assistants, artists, bookkeepers, catalogs and accessions, clerks, curators and assistants, design assistants, exhibit technicians, graphics, interpreters, park maintenance, public relations, and registrars and assistants.

This program includes a strong background and an active internship. Students are placed in one of several museums for their intern service. Intern positions are limited so that it is unlikely that a student will have a choice of the museum where he or she will be placed. Often, it will be necessary to do intern service at a museum some distance from Gaston College with the student doing a year's intern service in an entire quarter.

Program Information

Departmental approval is required for the admission to the Museum Technology Program.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ART	111	Two Dimensional Design	0	10	5
ENG	101	Freshman Grammar & Composition	3	0	5
HIS	101	World Civilization—Ancient	5	0	3
MUE	101	Introduction to Museum Science	3	0	3
			11	10	16

SECOND QUARTER

			Class	Lab	Credit
ART	112	Color and Design	0	10	5
BIO	101	General Biology	5	0	6
ENG	102	Freshman Literature	5	3	5
		Elective			3
			10	13	19

THIRD QUARTER

			Class	Lab	Credit
ART	114	Commercial Art Fundamentals	0	6	3
ENG	103	Public Speaking	5	0	5
PHO	101	Introduction to Photography	0	6	3
POL	203	State and Local Government	5	0	5
		Elective			3
			10	12	19

SUMMER QUARTER (OPTIONAL ELECTIVE)

			Class	Lab	Credit
ANT	280	Study Tour	2	12	6

FOURTH QUARTER

			Class	Lab	Credit
ART	116	Lettering for Commercial Art	0	6	3
MUE	181	Museum Science	1	10	2
		Elective(s)			11
			1	16	16

FIFTH QUARTER

			Class	Lab	Credit
ANT	204	General Cultural Anthropology	5	0	5
GEO	101	Physical Geography	5	2	6
MUE	182	Museum Science	1	10	2
		Elective			3
			11	12	16

SIXTH QUARTER

			Class	Lab	Credit
ANT	206	General Physical Anthropology	3	3	3
MUE	183	Museum Science	1	10	2
		Elective(s)			10
			4	13	15

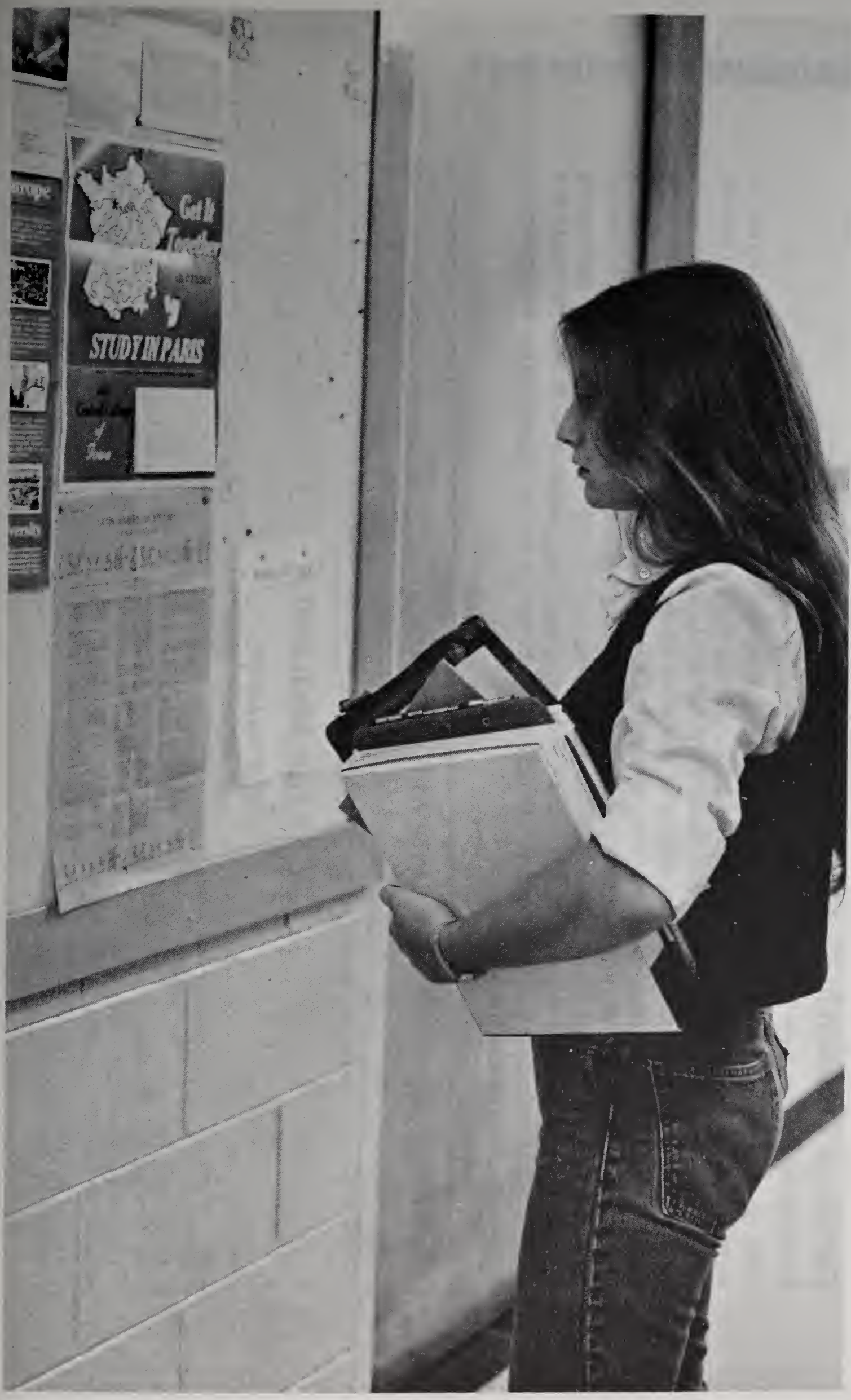
Total Hours Required for Graduation 101

Electives for Art and History Specialization:
ACT 201, ART 103, ART 131, ART 141, ART 151, ART 161, HIS 102, HIS 103, HIS 201, HIS 202.

Electives for Science and Natural History Specialization:
ACT 201, BIO 102, BIO 103, BIO 210, BIO 105, GLY 102.

Electives for Museum Education Specialization:
ACT 201, EDU 106, EDU 115, EDU 191, EDU 201.

Elective for Planetarium Specialization:
Astronomy course taken by the Consortium.


STUDY IN PARIS

Certificate Program In Museum Technology

Purpose of Curriculum

This certificate program is designed to provide relevant subject matter and experience in museum work for people with extensive education or work experience in their backgrounds. Students with Associate degrees, Bachelor degrees or Master's degrees in one field may seek to expand their employment opportunities in the area of museum work. This will provide both subject matter strengthening and intern experience. Due to the varied backgrounds of entering students, each program must be designed on an individual basis. Mue 270 and 271, Museum Assistant I and II are required of all students for this certificate. It is anticipated that some students will complete the program in two successive quarters while others will complete the program over two summer quarters. Entering freshmen would not be approved for this program except in unusual circumstances.

Program Information

Departmental approval is required for the admission to the Museum Technology (Certificate) Program.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
MUE	270	Museum Assistant I	1	20	3
		Elective(s)			9

SECOND QUARTER

			Class	Lab	Credit
MUE	271	Museum Assistant II	1	20	3
		Elective(s)			9
		TOTAL	—	—	— 24

Recommended Electives in Art:
Art 111, 112, 114, Pho 101.

Recommended Electives in Science and Natural History:
BIO 102, 103, Ant 204, 205, Gly 102.

Recommended Electives in History:
His 101, 201, 202.

Recommended Electives in Education:
Edu 106, 115, 191, 201.

Associate Of Applied Science Degree In Nursing (T-059)

Purpose of Curriculum

The Associate Degree (ADN) Program leading to a degree of Associate of Applied Science is seven quarters in length and incorporates courses in the behavioral, biological, and physical sciences as well as a concentration in nursing theory and practice. Upon successful completion of the program and with the recommendation of the nursing faculty, the graduate is eligible to take the licensing examination for Registered Nurse (R.N.).

Students in the Associate of Applied Science Nursing Program receive clinical experience in providing patient care at local health agencies: Gaston Memorial Hospital, Gaston County Health Center, and Catawba Memorial Hospital. Local physicians' offices and the Child Development Center provide additional experiences for students.

A minimum grade of "C" (80%) and satisfactory clinical performance are required to pass in each nursing course. Readmission will be considered on an individual and space available basis.

Persons admitted to the ADN Program will attend an orientation program prior to initial enrollment. This will generally be conducted during the Spring or Summer quarters.

Program Information

In addition to meeting the college admission requirements, applicants to the Associate Degree Nursing Program must meet the following:

1. Attain a minimum composite score of 17 on the ACT test (taken within the past five years).
2. Submit a physician's statement, including record of updated immunizations and physical and emotional status.
3. Must be a high school or GED graduate.
4. Take a math and reading pretest to determine if developmental work is needed in these areas prior to entry into the program.
5. Successfully complete high school chemistry or the equivalent. If five years or more have lapsed since the chemistry course was taken, an exam will be given to determine if additional work is needed.
6. Schedule a personal interview with nursing faculty is recommended.
7. CHM 100 must be completed before entrance to the nursing sequence.

Health Career Programs are limited. Applicants are advised to apply early.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Clinical	Credit
BIO	121	Anatomy and Physiology I	3	2	0	4
NSG	101	Basic Nursing Concepts	6	3	4	8
PSY	201	General Psychology	5	0	0	5
			14	5	4	17

SECOND QUARTER

			Class	Lab	Clinical	Credit
BIO	122	Anatomy and Physiology	3	2	0	4
NSG	102	Integration of Basic Nursing Concepts	5	3	9	9
NSG	132	Pharmacology in Nursing	2	0	0	2
NUT	101	Nutrition	3	0	0	3
			13	5	9	18

THIRD QUARTER

			Class	Lab	Clinical	Credit
BIO	124	Bacteriology and Pathology	4	2	0	5
NSG	104	Medical-Surgical Nursing I	5	2	10	9
PSY	229	Abnormal Psychology	5	0	0	5
			14	4	10	19

FOURTH QUARTER

			Class	Lab	Clinical	Credit
ENG	101	Freshman Grammar & Composition	5	0	0	5
NSG	103	Psychiatric Nursing	5	0	12	9
PSY	250	Life Span Development	5	0	0	5
			15	0	12	19

FIFTH QUARTER

			Class	Lab	Clinical	Credit
NSG	201	Maternity Nursing	5	3	12	10
SOC	102	Introductory Sociology	5	0	0	5
			10	3	12	15

SIXTH QUARTER

			Class	Lab	Clinical	Credit
NSG	202	Pediatric Nursing	5	3	12	10
ENG	102	Freshman Literature, or	5	0	0	5
ENG	103	Public Speaking	5	0	0	5
			15	3	12	15

SEVENTH QUARTER

			Class	Lab	Clinical	Credit
NSG	203	Medical-Surgical Nursing II	5	0	18	11
NSG	206	Comprehensive Nursing	3	0	0	3
NSG	207	Perspectives of Nursing Practice	2	0	0	2
			10	0	18	16

Total Hours Required for Graduation 119

Associate Of Applied Science Degree In Nursing
LPN to RN Conversion Track (T-059)

Purpose of Curriculum

The Associate Degree (ADN) Program leading to a degree of Associate of Applied Science (LPN to RN Conversion Track) varies in length, depending upon the student's ability to challenge nursing courses within the ADN curriculum. The program incorporates courses in the behavioral, biological, and physical sciences as well as a concentration in nursing theory and practice. Upon successful completion of the program and with the recommendation of the nursing faculty, the graduate is eligible to take the licensing examination for Registered Nurse (RN).

Students in the Associate of Applied Science Nursing Program receive clinical experience in providing patient care at local health agencies: Gaston Memorial Hospital, Gaston County Health Department, and Catawba Memorial Hospital. Local physicians' offices and the Child Development Center provide additional experiences for students.

A minimum grade of "C" (80%) and satisfactory clinical performance are required to pass in each nursing course (NSG prefix). Readmission will be considered on an individual and space available basis.

Persons admitted to the ADN Program, LPN to RN Conversion Track must complete NSG 090 before beginning the nursing sequence.

Program Information

In addition to meeting the college admission requirements, applicants to the Associate Degree Nursing Program must meet the following admission requirements:

1. Complete admission application to LPN-RN Conversion Program.
2. Secure recommendations from the current or most recent employer or supervisor,
   or
   Secure recommendation from Director or Dean of School of Nursing which applicant graduated within the past three years.
3. Current license to practice nursing in the State of North Carolina
4. Attain an ACT composite score of 17 or above. ACT must be taken within the past five years,
   or
   Complete CHM 100, BIO 121, and BIO 122 with 3.00 average before entrance in the nursing sequence. The Biology courses must be taken at Gaston College.
5. Submit a physician's and dentist's statement of physical and emotional health. The faculty reserves the right to request additional information from physicians when necessary to determine applicant's ability to conform to the nursing curriculum.
6. Submit transcripts of high school, GED, and LPN curriculum and all college work. Science and Psychology courses must have been completed within five years of application. Nursing courses may be challenged within five years of application. Nursing courses may be challenged but not transferred.
7. Achieve a grade point average of 2.00 in all academic work taken in applicant's nursing curriculum.
8. Schedule personal interview with nursing faculty if recommended.
9. Satisfactorily complete and pass challenge exams with 80 percent accuracy.
10. Complete nine hours of related course work before entrance to nursing sequence.
11. Take math and reading pretests for nursing in Learning Lab.
12. Complete CHM 100 or its equivalent before entrance to the nursing sequence unless high school chemistry was completed within five years.

Transfer students must meet the following requirements:

1. All entrance requirements applying to incoming freshmen.
2. Recommendation from the Director or the Dean of School of Nursing from which the applicant is transferring.
3. Grade point average of 2.000 in all academic work taken in applicant's previous nursing curriculum.
4. Transcripts from high school, GED, nursing school and from any college attended.

Admission of students is determined by the nursing faculty.

Applicants will be notified of their admission status by the Director of Admissions. Those students who are not admitted may reapply at a later date.

Diploma In Practical Nursing (V-038)

Purpose of Curriculum

PRACTICAL NURSING STUDENTS WILL NOT BE ACCEPTED UNTIL THE FALL QUARTER , 1985.

The Practical Nursing Program, which is a one year (4 quarters) in length, stresses theory and practice in nursing care. Upon successful completion of the program a diploma is granted, and with the recommendation of the nursing faculty, the graduate is eligible to write licensing examination for Licensed Practical Nurse (L.P.N.)

Students in the Practical Nursing Education Program receive clinical experience in rendering patient care at Gaston Memorial Hospital. An additional site may be used if necessary as close as possible to Gaston College.

Students in the PNE Program must earn a minimum grade of "C" (80%) in each of their major courses (NSG prefix) to progress in the program. Readmission will be considered on an individual and space available basis.

Persons admitted to the PNE Program will attend an orientation program prior to initial enrollment. This will generally be conducted during the Spring or Summer quarters.

Program Information

To be considered for admission to the Program, the following requirements must be met:

In addition to meeting the general college requirements, applicants to the Practical Nursing Program must meet the following:

1. Submit high school transcript showing completion of not less than ninth grade or GED scores.
2. Submit ACT scores.
3. Attain a minimum composite score of 14 on the ACT.
4. Submit physician's statement including a record of updated immunizations and physical and emotional status.
5. Schedule a personal interview with the nursing faculty.
6. Take math pretest to determine if developmental math will be required prior to entry into the program.

Health Career Program enrollments are limited. Applicants are advised to apply early.

Practical Nursing students will not be accepted until the Fall Quarter, 1985.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Clinical	Credit
BIO	1212	Human Biology	2	4	0	4
MOA	100	Medical Terminology	3	0	0	3
NSG	1011	Fundamentals of Nursing I	6	3	6	9
NUT	1101	Nutrition	3	0	0	3
			14	7	6	19

SECOND QUARTER

			Class	Lab	Clinical	Credit
BIO	1222	Human Biology	2	4	0	4
NSG	1232	Pharmacology in Nursing	3	0	0	3
NSG	1022	Fundamentals of Nursing II	6	3	15	12
			11	7	15	19

THIRD QUARTER

			Class	Lab	Clinical	Credit
NSG	1033	Maternal & Child Health Nursing	6	0	18	12
ENG	091	Grammar & Composition	5	0	0	5
			11	0	18	17

FOURTH QUARTER

			Class	Lab	Clinical	Credit
NSG	1044	Medical-Surgical Nursing	6	3	18	13
NSG	1045	Perspectives in Practical Nursing	2	0	0	2
			8	3	18	15

Total Hours Required for Graduation 70

Associate Of Applied Science Degree In Secretarial-Executive (T-030)

Purpose of Curriculum

The Executive Secretarial curriculum is designed to prepare the individual to enter the secretarial profession, to provide an educational program for individuals wanting education for upgrading (moving from one secretarial position to another) or retraining (moving from present position to secretarial position), and to provide an opportunity for individuals wanting to fulfill professional or general interest needs.

Skill development in the areas of typewriting, shorthand, transcription, and office machines operation will provide the opportunity for the individual to develop both skills and personal competencies needed to perform well in an office.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
*BUS	101	Beginning Typewriting	2	3	3
*BUS	201	Beginning Shorthand	5	0	5
ENG	101	Freshman Grammar and Composition	5	0	5
DMK	105	Personal Development	3	0	3
			15	3	16

SECOND QUARTER

			Class	Lab	Credit
BUS	102	Intermediate Typewriting	2	3	3
BUS	104	Introduction to Business	5	0	5
BUS	111	Business Mathematics	5	0	5
BUS	202	Intermediate Shorthand	5	0	5
			17	3	18

THIRD QUARTER

			Class	Lab	Credit
BUS	103	Advanced Typewriting	2	3	3
BUS	203	Advanced Shorthand	5	0	5
BUS	208	Word Processing	2	3	3
DAP	150	Computer Fundamentals	3	2	4
		Humanities Course	3	0	3
			15	8	18

FOURTH QUARTER

			Class	Lab	Credit
ACT	101	Secretarial Accounting	5	0	5
BUS	209	Business Law	5	0	5
ENG	103	Public Speaking	5	0	5
		Social Science Course	3	0	3
			18	0	18

FIFTH QUARTER

			Class	Lab	Credit
BUS	108	Business Communications	5	0	5
BUS	204	Advanced Shorthand-Executive	5	0	5
ECO	201	Principles of Economics	5	0	5
			15	0	15

SIXTH QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting	3	0	3
BUS	109	Secretarial Practice	2	3	3
BUS	120	Personal Finance	5	0	5
BUS	242	Human Relations in Business	3	0	3
		Elective			5
			13	3	19

Total Hours Required for Graduation 104

*Students who have taken typewriting and/or shorthand in high school may, with permission of the department chairman, omit BUS 101 and/or BUS 201. Other courses must be substituted for any omitted.

Humanities Courses:
Art, Literature (not ENG 102), Modern Language, Music, Philosophy (not PHL 203), Religion.

Social Science Courses:
Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology.

Associate Of Applied Science Degree In Secretarial-Legal (T-031)

Purpose of Curriculum

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

These purposes will be fulfilled through skill development in the areas of typewriting, shorthand transcription, and machines operation. Through these skills the individual should be able to perform legal, office-related activities.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
*BUS	101	Beginning Typewriting	2	3	3
BUS	104	Introduction to Business	5	0	5
*BUS	201	Beginning Shorthand	5	0	5
ENG	101	Freshman Grammar and Composition	5	0	5
			17	3	18

SECOND QUARTER

			Class	Lab	Credit
BUS	102	Intermediate Typewriting	2	3	3
BUS	202	Intermediate Shorthand	5	0	5
POL	203	State and Local Government	5	0	5
DMK	105	Personal Development	3	0	3
		Humanities Course	3	0	3
			18	3	18

THIRD QUARTER

			Class	Lab	Credit
BUS	103	Advanced Typewriting	2	3	3
BUS	111	Business Mathematics	5	0	5
BUS	203	Advanced Shorthand	5	0	5
BUS	208	Word Processing	2	3	3
			14	6	16

FOURTH QUARTER

			Class	Lab	Credit
ACT	101	Secretarial Accounting	5	0	5
BUS	209	Business Law	5	0	5
**CJC	101	The Criminal Justice System	5	0	5
		Social Science Course	3	0	3
			18	0	18

FIFTH QUARTER

			Class	Lab	Credit
BUS	108	Business Communications	5	0	5
BUS	205	Advanced Shorthand-Legal	5	0	5
DAP	150	Computer Fundamentals	3	2	4
		Elective			
			13	2	16

SIXTH QUARTER

			Class	Lab	Credit
ACT	200	Payroll Accounting	3	0	3
BUS	109	Secretarial Practice	2	3	3
BUS	210	Business Law	5	0	5
BUS	242	Human Relations in Business	3	0	3
		Elective			3
			13	3	17

Total Hours Required for Graduation 104

*Students who have taken typewriting and/or shorthand in high school may, with permission of the department chairman, omit BUS 101 and/or BUS 201. Other courses must be substituted for any omitted.

**CJC 115—Criminal Law or CJC 201—Criminal Justice Process may be substituted for CJC 101 if necessary in scheduling classes.

Humanities Courses:
Art, Literature (not ENG 102), Modern Language, Music, Philosophy (not PHL 203), Religion.

Social Science Courses:
Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology.

Associate of Applied Science Degree in Secretarial-Medical (T-032)

Purpose of Curriculum

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

These purposes will be fulfilled through skill development in the areas of typewriting, shorthand transcription, and machines operation. Through these skills, the individual should be able to perform medical, office-related activities.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
*BUS	101	Beginning Typewriting	2	3	3
*BUS	201	Beginning Shorthand	5	0	5
ENG	101	Freshman Grammar and Composition	5	0	5
MOA	100	Medical Terminology and Vocabulary I	3	0	3
			15	3	16

SECOND QUARTER

			Class	Lab	Credit
BIO	110	Integrated Paramedical Biology	5	2	6
BUS	102	Intermediate Typewriting	2	3	3
BUS	202	Intermediate Shorthand	5	0	5
DMK	105	Personal Development	3	0	3
		Humanities Course	3	0	3
			18	5	20

THIRD QUARTER

			Class	Lab	Credit
BUS	103	Advanced Typewriting	2	3	3
BUS	111	Business Mathematics	5	0	5
BUS	203	Advanced Shorthand	5	0	5
BUS	208	Word Processing	2	3	3
			14	6	16

FOURTH QUARTER

			Class	Lab	Credit
ACT	101	Secretarial Accounting	5	0	5
BUS	104	Introduction to Business	5	0	5
DAP	150	Computer Fundamentals	3	2	4
MOA	211	Medical Transcription I	3	2	4
			16	4	18

FIFTH QUARTER

			Class	Lab	Credit
BUS	108	Business Communications	5	0	5
BUS	206	Advanced Shorthand—Medical	5	0	5
PSY	201	General Psychology	5	0	5
**		Elective			1
			15	0	16

SIXTH QUARTER

			Class	Lab	Credit
BUS	109	Secretarial Practice	2	3	3
BUS	120	Personal Finance	5	0	5
BUS	209	Business Law	5	0	5
ECO	201	Principles of Economics	5	0	5
			17	3	18

Total Hours Required for Graduation 104

*Students who have taken typewriting and/or shorthand in high school may, with permission of the department chairman, omit BUS 101 and/or BUS 201. Other courses must be substituted for any omitted.

**Students are encouraged to take MOA 212 Medical Transcription II—a continuation of MOA 211. Successful completion of this course will entitle the students to receive the American Records Association Medical Transcription Certificate.

Humanities Courses:
Art, Literature (not ENG 102), Modern Language, Music, Philosophy (not PHL 203), Religion.

Associate Of Applied Science Degree In Social Services Associate (T-107)

Purpose of Curriculum

The Social Service Associate curriculum is designed to prepare individuals for work in service delivery to people and to deliver concrete, specific services to individuals, groups and communities. Study and application will be employed in improving the functions of individuals in areas such as income maintenance, family services, child welfare services, rehabilitation services, senior citizen services and other special group services such as juvenile delinquents, unwed mothers or unskilled, disadvantaged minorities.

Graduates will find career opportunities in organizations which provide income maintenance, mental health services, medical social services, correctional services, services to children and families, gerontological services and community organizational programs.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ENG	101	Freshman Grammar and Composition	5	0	5
SOC	102	Introductory Sociology	5	0	5
SOC	103	Marriage and Family Relations	3	0	3
		Elective			5
			13	0	18

SECOND QUARTER

			Class	Lab	Credit
ENG	102	Freshman Literature	5	0	5
PSY	201	General Psychology	5	0	5
SOC	214	Introduction to Social Services	3	0	3
		Elective			5
			13	0	18

THIRD QUARTER

			Class	Lab	Credit
ENG	103	Public Speaking	5	0	5
PSY	206	Psychology of Adjustment	5	0	5
SOC	109	Community Resources	3	0	3
		Elective			5
			13	0	18

FOURTH QUARTER

			Class	Lab	Credit
BUS	112	Business Report Writing	5	0	5
SOC	110	Human Sexuality	3	0	3
SOC	202	Social Problems	5	0	5
		Elective			5
			13	0	18

FIFTH QUARTER

			Class	Lab	Credit
PED	210	Health Education	3	0	3
PSY	204	Adolescent Psychology	5	0	5
SOC	215	Interpersonal Relations	3	0	3
		Elective			5
			11	0	16

SIXTH QUARTER

			Class	Lab	Credit
PSY	203	Child Psychology	5	0	5
SOC	218	Group Dynamics	3	0	3
SOC	240	Seminar and Practicum	0	10	1
		Elective			5
			8	10	14

Total Hours Required for Graduation 102

Associate Of Applied Science Degree In Teacher Associate—Reading (T-088)

Purpose of Curriculum

The Teacher Associate curriculum with reading emphasis is designed to prepare individuals as assistants to classroom teachers in social and educational fields. The curriculum is designed to provide a course of study for individuals who have the desire and capability to work with primary and elementary school children in the specialized area of reading under the supervision of the classroom teacher.

The graduate of this curriculum should be qualified to enter the field as a paraprofessional, performing all duties required of a teacher aide.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
BUS	101	Typewriting	2	3	3
EDU	116	Communicating with Young Children	4	2	5
PSY	201	General Psychology	5	0	5
RED	110	Introduction to Reading	4	2	5
			15	7	18

SECOND QUARTER

			Class	Lab	Credit
EDU	113	The Behavior of Children	4	2	5
ENG	101	Freshman Grammar and Composition	5	0	5
RED	111	Reading Methods-Approaches	4	2	5
			13	4	15

THIRD QUARTER

			Class	Lab	Credit
EDU	212	Mathematics for Young Children	4	2	5
EDU	234	Production and Utilization of Audio-Visual Materials	3	3	4
PED	210	Health Education	3	0	3
RED	112	Reading Methods-Skills	4	2	5
			14	7	17

FOURTH QUARTER

			Class	Lab	Credit
EDU	203	The Exceptional Child	3	0	3
ENG	103	Public Speaking	5	0	5
ENG	217	Children's Literature	3	0	3
PED	230	First Aid	3	0	3
			14	0	14

FIFTH QUARTER

			Class	Lab	Credit
EDU	211	Science in the Early Childhood Program	4	2	5
RED	202	Evaluation of Reading Programs, Teaching Materials, and Achievement Tests	4	3	5
RED	204	Seminar and Practice in Reading Education I	2	6	4
			10	11	14

SIXTH QUARTER

			Class	Lab	Credit
RED	203	Reading in Content Areas	3	6	5
RED	205	Seminar and Practice in Reading Education II	2	6	4
SOC	215	Interpersonal Relationships and Communication	3	0	3
		Elective			1
			8	12	13

SEVENTH QUARTER

			Class	Lab	Credit
RED	206	Supervised Internship in Reading Education	4	30	14
			4	30	14

Total Hours Required for Graduation 105

Associate Of Applied Science Degree In Transportation (T-034)

Purpose of Curriculum

The Traffic and Transportation curriculum is designed to provide an educational program in the techniques of state and federal laws and regulations applicable to traffic and transportation which would prepare this individual to enter such careers as dispatcher, claims clerk, rate clerk, operational clerk, dock supervisor, billing clerk, rate analysis, operations supervisor, dock and loading foreman and moving counselor. Objectives of this curriculum are to develop knowledge and skills in (1) the principles of organization and management in the traffic and transportation industry, (2) the Interstate Commerce Act and other related traffic and transportational acts, (3) the communication responsibility of traffic and transportation, and (4) the role and influence of traffic and transportation on the economy.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
DMK	151	Principles of Transportation	5	0	5
BUS	152	Traffic Management	5	0	5
BUS	111	Business Mathematics	2	3	3
BUS	101	Beginning Typewriting	2	3	3
			17	3	18

SECOND QUARTER

			Class	Lab	Credit
ENG	101	Freshman Grammar & Composition	5	0	5
DMK	152	Traffic Management	5	0	5
DAP	150	Computer Fundamentals	3	2	4
GEO	204	Economic Geography	3	0	3
			16	2	17

THIRD QUARTER

			Class	Lab	Credit
DMK	253	Carrier Rates	5	0	5
DMK	154	Transportation Law & Procedure	5	0	5
BUS	209	Business Law	5	0	5
		Humanities Course	3	0	3
			18	0	18

FOURTH QUARTER

			Class	Lab	Credit
ACT	201	Principles of Accounting, Introductory	5	0	5
BUS	112	Business Report Writing	5	0	5
ECO	201	Principles of Economics	5	0	5
DMK	255	Domestic Transportation Claims	3	0	3
			18	0	18

FIFTH QUARTER

			Class	Lab	Credit
ACT	202	Principles of Accounting	5	0	5
ECO	202	Principles of Economics	5	0	5
DMK	256	International Transportation	5	0	5
			15	0	15

SIXTH QUARTER

			Class	Lab	Credit
BUS	210	Business Law	5	0	5
DMK	132	Salesmanship	5	0	5
BUS	121	Principals of Management	5	0	5
			15	0	15

Total Hours Required for Graduation 101

Humanities Courses: Art, Literature (except ENG 102), Modern Language, Music, Philosophy (except PHL 203), Religion.

Diploma In Trade And Industrial Programs In Welding (V-050)

Purpose of Curriculum

The content of this curriculum is designed to give students a sound understanding of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry.

The field of welding offers a person prestige, security, and a future of continuous employment with steady advancement. It offers employment in practically any industry: ship-building, automotive, aircraft, guided missiles, railroads, construction, pipefitting, production shop, job shop and many others.

Job Description

The principal duty of the welder using manual techniques is to control the melting by directing the heat, from either an electric or gas welding torch, and to add filler metal where necessary to complete the joint. He should possess a great deal of manipulative skill with a knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

QUARTER SEQUENCE

FIRST QUARTER

			Class	Lab	Credit
ENG	1102	Communication Skills	2	0	2
MAT	1101	Trade Math I	4	0	4
MEC	1111	Machine Processes I	0	3	1
PHY	1112	Basic Electricity	3	3	4
WLD	1101	Oxy-Acetylene Welding	3	12	7
			12	18	18

SECOND QUARTER

			Class	Lab	Credit
DFT	1111	Blueprint Reading	0	3	1
PSY	1102	Human Relations	2	0	2
MAT	1102	Trade Math II	4	0	4
PHY	1111	Basic Mechanics	3	3	4
WLD	1102	Arc Welding	3	12	7
			12	18	18

THIRD QUARTER

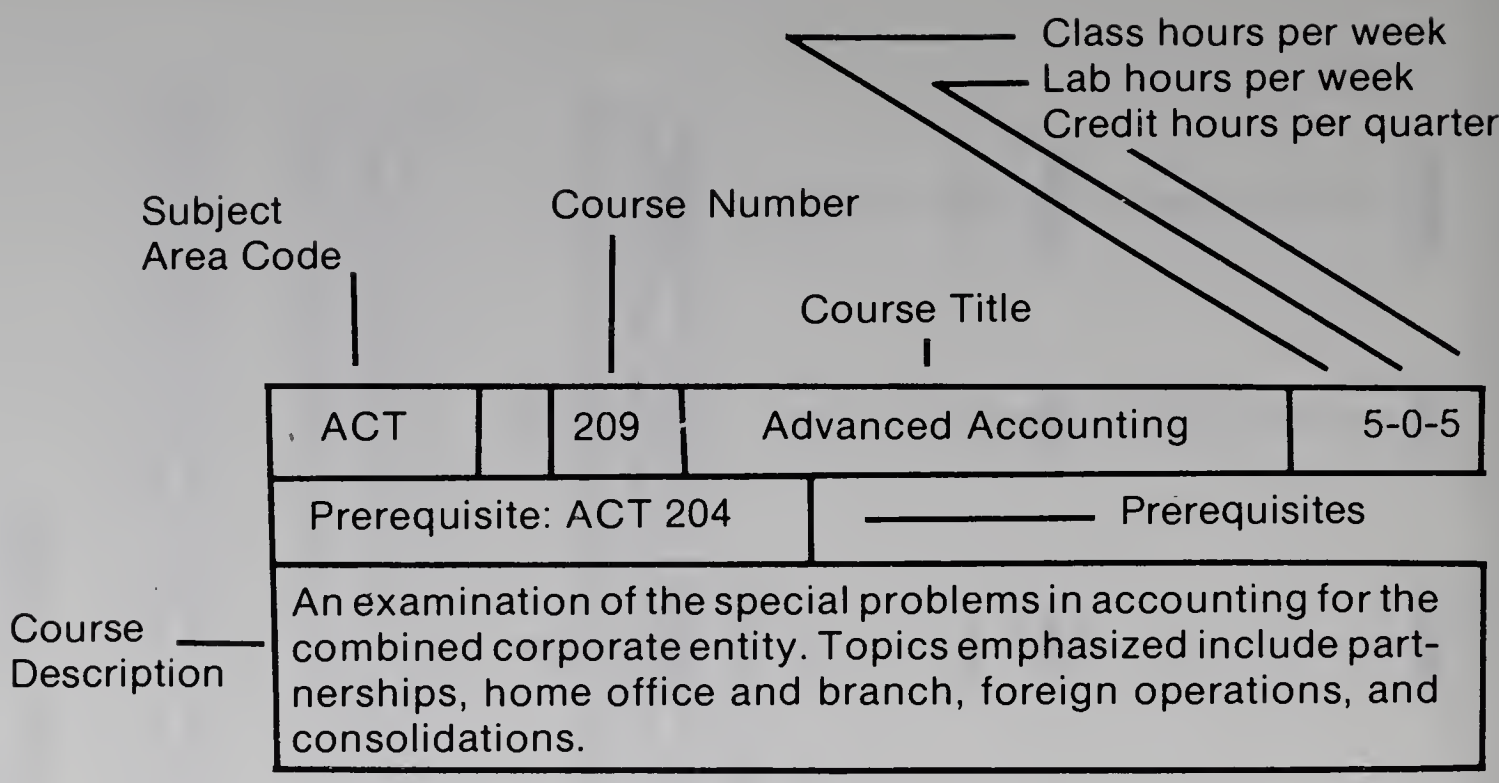
			Class	Lab	Credit
MEC	1123	Structure of Metals I	4	0	4
WLD	1113	Inert Gas Welding	6	9	9
WLD	1123	Blueprint Reading For Welders	0	3	1
WLD	1133	Mechanical Test & Inspection	4	0	4
WLD	1144	Estimating	4	0	4
			18	12	22

FOURTH QUARTER

			Class	Lab	Credit
WLD	1104	Advanced Welding	3	12	7
WLD	1134	Introduction to Pipe Welding	3	12	7
			6	24	14

Total Hours Required for Graduation 72

How to Read the Course Description



COURSE DESCRIPTIONS

Accounting

ACT 101 Secretarial Accounting (5-0-5)
Prerequisite: None
This course is designed to meet on-the-job needs of secretaries and medical office assistants in the area of accounting. The course provides a basic understanding of the accounting process without getting into the complicated theoretical aspects of accounting. Emphasis is on accounting procedures rather than concepts.

ACT 200 Payroll Accounting (3-0-3)
Prerequisite: ACT 201
A detailed study of federal and state regulations, computations, deductions, and accounting for payrolls.

ACT 201 Principles of Accounting, Introductory (5-0-5)
Prerequisite: None
An introductory course in standard accounting practice. Recognized procedures and conventions are explained and used for recording, analyzing, and interpreting the records of business.

ACT 202 Principles of Accounting (5-0-5)
Prerequisite: ACT 201
A continuation of Accounting 201 with emphasis on partnerships and corporations.

ACT 203 Intermediate Accounting (5-0-5)
Prerequisites: ACT 201, 202
The course presents the basic concepts underlying modern accounting. The material includes principles, procedures, and methods that are applied in the preparation of financial statements. Attention is given to the proper uses that can be made of financial data.

ACT 204 Intermediate Accounting (5-0-5)
Prerequisites: ACT 201, 202
A continuation of Accounting 203 with discussions relative to non-current assets and liabilities. Factors governing accounting for the corporation receive particular emphasis.

ACT 205 Introductory Cost Accounting (5-0-5)
Prerequisite: ACT 201
A study of the theory and practice of accounting for the costs of manufacturing and selling. The treatment of labor, material, and overhead are given detailed consideration. Designed to develop an appreciation of the uses of cost information in the administration and control of business organizations.

ACT 206 Income Tax Accounting (5-0-5)
Prerequisite: None
A study of the Internal Revenue Code, regulations, and cases which apply to the determination of taxation for individuals, partnerships, and corporations. Consideration is given to income, deductions, and filing.

ACT 207 Auditing (5-0-5)
Prerequisites: ACT 201, 202
A survey of auditing principles, procedures, and standards. Attention is given to the concepts underlying the examination of accounting records and financial statements to ascertain their accuracy and the acceptability of the accounting principles used in their preparation.

ACT 208 Managerial Accounting (5-0-5)
Prerequisites: ACT 201, 202
Managerial Accounting emphasizes how accounting data can be interpreted and used by management in planning and controlling business activities of the firm. The use of accounting data by investors is discussed whenever appropriate.

Air Conditioning, Heating and Refrigeration

AHR 1101 Principles of Refrigeration (3-12-7)
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. Practice will be given in basic refrigeration jobs such as tube bending, flaring, swaging, identification of fittings, soldering and use of basic equipment.

AHR 1102 Domestic & Commercial Refrigeration (3-12-7)
Refrigeration service practice on domestic and commercial refrigeration systems using conventional, hermetric, and absorption systems. Cabinet care, controls, system maintenance, and system replacement will be stressed. Typical service problems will be solved by each student.

AHR 1103 Principles of Air Conditioning (3-9-6)
The history, theory, and factors covering air conditioning are studied. Instruction will include air conditioning terminology, temperature measurement, air movement, humidity, psychometric properties, comfort zone, effective temperature, duct systems, air diffusion, air cleaning zone, testing instruments and heat loads.

AHR 1104 All-Year Comfort Systems (3-6-5)
Auxiliary equipment used in conjunction with refrigeration systems to provide both heating and cooling for "all-year" comfort will be studied and systems will be designed using this auxiliary equipment. Included will be oil-fired systems, gas-fired systems, water-circulated systems, resistance-systems and the special controls used in the "all-year" comfort systems.

AHR 1113 Calculation Of Heat Loss & Gain (6-0-6)
Practice in computing system loads, equipment sizing and balancing, and the use of charts and tables pertaining to refrigeration and air-conditioning equipment.

AHR 1114 Estimating (4-3-5)
Practical exercises in estimating for the student to gain experience. The student will prepare estimates and submit bids on projects involving the major types of refrigeration and air conditioning systems used in domestic and commercial building.

AHR 1122 Automatic Controls I (3-3-4)
A practical course dealing with relays, solenoids, thermostatic and pressure motor controls, defrost controls, and wiring diagrams. Emphasis will be placed on proper diagnosis of electrical troubles in sealed refrigeration systems.

AHR 1133 Solid State Controls (3-3-4)
This is a basic course in the solid state speed control devices and the temperature control devices which are used in the air conditioning and refrigeration industry. Emphasis is placed on understanding the operations of each component in the control device.

AHR 1153 Transport Refrigeration (0-3-1)
This is a survey course in transport refrigeration. Material covered will be the types of engines used to drive units, three phase generators, variable voltage relays and solenoid valves, strip heaters, reversing systems, and unloading devices peculiar to this type mechanism.

AHR 1154 Reverse Refrigeration(2-6-4)
Complete study of heat pump installation, its controls, theory and operation. Practical work experience in trouble shooting on systems.

AHR 1164 Automotive Air Conditioning (3-3-4)
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.

Banking and Finance

AIB 202 Principles of Banking Operations (3-0-3)
Prerequisite: None
This course provides an updated and broad perspective of the banking industry. As the foundation for most subsequent AIB courses, Principles of Banking touches on nearly every aspect of bank functions. Included is a comprehensive introduction to banking in today's economy. Discussions on specific topics are presented in an accessible form. The language and documents of banking, check processing, teller, functions, deposit function, trust services, bank bookkeeping and bank loans and investments are some primary topics. The course ends with a discussion of the bank's role in the community.

AIB 203 Bank Cards (3-0-3)
Prerequisite: None
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. The interrelated nature of the various bank card functions is emphasized. 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, and security and fraud. The course also discusses the evolution of credit cards into Electronic Funds Transfer, legal developments affecting credit cards, and the regulatory environment in which banks operate their card business.

AIB 204 Economics in Banking (3-0-3)
Prerequisite: None
This course covers both micro and macroeconomics and devotes considerable time to current developments in national and international areas.

AIB 205 Inside Commercial Banking
Prerequisite: None **(3-0-3)**
The purpose of this course is to identify topics and issues which bankers must be prepared to address and discuss the quest for solution and responses. Coverage includes: a historical overview of the American Banking, the constituencies of commercial banks, effective management of bank funds, uses of funds, retail banking, use of funds, wholesale banking, electronic funds transfer system, multinational banking, specialized service areas, regulatory constraints, and the new world of banking.

AIB 206 Law and Banking (3-0-3)
Prerequisite: None
This course is designed not only to present an introduction to basic commercial law, but to relate it more specifically to banking and banking transactions. Topics include: contracts, agency and partnerships, corporations, real property, personal property and sales, the Uniform Commercial Code, negotiable instruments and bank collections, and secured financing.

AIB 207 Bank Investments (3-0-3)
Prerequisite: None
The objectives of this course are to explain the nature of the more important bank investments, to demonstrate the relationship of investment management to other functional areas of the bank, and to discuss the factors that affect investment strategies and decisions. Emphasis throughout is on the basic principles with which investment personnel should be familiar—fundamentals such as the nature of risk, liquidity, and yield; how each is measured; and how they are related.

AIB 208 Consumer Compliance (1-0-1)
Prerequisite: None
This course provides an overview of the major federal consumer compliance laws and regulations. Each module addresses common violations found in each area with suggestions for establishing policies and procedures to help avoid common violations. Key compliance areas are addressed, such as: Equal Credit Opportunity, Truth in Lending, Real Estate transactions, Electronics Funds transfer, Advertising, Interest on Deposits, Fair Debt Collection, and Fair Credit Reporting.

AIB 209 Installment Credit (3-0-3)
Prerequisite: None
This course emphasizes the pragmatic "how-to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance, and rate structure and yields.

AIB 210 Money and Banking (3-0-3)
Prerequisite: None
This course presents the basic economic principles most closely related to the subject of money and banking in a context of topics of interest to present and prospective bank management. The course stresses the practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money, banks and the money supply; cash assets and liquidity management; bank investments; loans, earnings and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system.

AIB 220 Bank Management (3-0-3)
Prerequisite: None
This course presents trends which have emerged in the philosophy and practice of bank management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management, but rather of bank management. It touches on objectives, planning, structure, control, and the interrelationship of various bank departments.

AIB 230 Selling Bank Services (1-0-1)
Prerequisite: None
This course teaches how to recognize and meet bank customer needs through checking accounts, savings services, loans to individuals, safe deposit, travelers checks, and cross-selling. Upon completion of this course attendees will be able to list the services their banks offer, describe the scope and advantages of these banking services, identify customer needs from a bank transaction or from a conversation with the customer and relate the appropriate service to the preceived customer need.

AIB 231 International Banking (3-0-3)
Prerequisite: None
This course presents an overview of one of the fastest growing areas of U.S. commercial banking, those new to the field, and for others involved in domestic activities of their banks. The objective of the 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, international lending, and how money is changed from one currency to another. Also included are discussions on the basic letter of credit, collections and the Eurodollar market.

AIB 232 Corporate Banking (3-0-3)
Prerequisite: None
This practical, common sense approach to lending incorporates the exact sequential nature of the lending process, giving bankers a solid foundation on which to construct sound lending practices. Content highlights include: the lending process, the lending environment, the loan request, financial analysis, loan structuring, and loan administration.

AIB 233 Analysis of Financial Statements (5-0-5)
Prerequisite: None
This course offers the student tools and techniques necessary for the evaluation of financial condition and operating performance of a modern business enterprise. The course is divided into four parts: Financial Statement Analysis and Accounting; Financial Statements and Business Funds Flow; Tools of Financial Statements Analysis; and the Technique of Financial Statement Analysis. The last part is subdivided into modules covering short-term liquidity and solvency, funds flow analysis of operations, long-term financial strength and asset utilization.

AIB 234 Loan Officer Development (3-0-3)
Prerequisite: None
This course offers new leaders comprehensive training in the subjective skills they'll need every time they come face-to-face with a customer. Content highlights include: Initial Loan Review; Documentation for the Credit File; Managing Loan Portfolios; Problem Loans; Negotiation and Persuasion Techniques; Loan Pricing and Administrative Decisions.

AIB 235 Trust Functions and Services (3-0-3)
Prerequisite: None
This course provides an overview of many of the generally accepted principles of the law of estates, trust, and agencies as it takes the student on a step-by-step study of trust functions and services encounters in the daily operation of a trust department.

Anthropology

ANT 201 The Ascent of Man (3-0-3)
Prerequisite: None
A series of thirteen films by Jacob Bronowski tracing the ascent of man from his beginnings on the savannahs of Africa several million years ago to his present space-age and atomic technology. The films present a wholistic view of man's ascent, involving a study of biology, history, sociology, cultural variation, genetics, technology, etc.

ANT 204 General Cultural Anthropology (5-0-5)
Prerequisite: None
The science of man and the development of his culture; culture of ancient and contemporary preliterate societies; dynamics of cultural change and acculturation.

ANT 206 General Physical Anthropology (3-0-3)
Prerequisite: None
The study of the physical evolution of mankind; modern racial types and genetics.

ANT 280 Study Tour (2-12-6)
Prerequisite: None
A five week, condensed course involving three weeks of intensive study on the campus of Gaston College, followed by two weeks of off-campus study and travel. This course may involve travel within the United States or abroad as an open laboratory exercise for students. This course involves an interdisciplinary study including history, culture, art, architecture, music, politics, etc., with special emphasis given to one or more of these topics. Also offered as HIS 280, SOC 280, and POL 280.

ANT 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subjects
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning a topic in Anthropology.

Art

ART 101 Art Appreciation (3-0-3)
Prerequisite: None
A general lecture course examining the different functions, the visual and stylistic traits of art, and the traditional and contemporary design concepts used in the visual arts. Open to all students except art majors.

ART 102 Art Seminar (3-0-3)
Prerequisite: None
Art Seminar is specifically designed for art majors, but it is open to all students. Special emphasis is given to assigned readings, reports, or projects. The seminar will mainly deal with the role of art in the Contemporary World.

ART 103 Art History (5-0-5)
Prerequisite: None
This course is a survey of the visual arts during the various cultural periods of Western Civilization. The major art works of the period, the various design concepts and theories, the cultural and stylistic characteristics of works and the impact visual arts have had on man and his environment are emphasized. This course is required for art majors, but it is open to all students.

ART 111 Two Dimensional Design (0-10-5)
Prerequisite: None
This is a basic course in two dimensional design for art majors. Concentration is on the psychological and physiological aspects of design elements and principles. Development of basic skills in the use of various tools and materials is stressed in solving visual problems.

ART 112 Color and Design (0-10-5)
Prerequisite: None
An investigation of the elements and principles of two and three dimensional design, this basic course is designed to meet state requirements for elementary teachers' certification. Emphasis is on the development of design concepts, teaching methods, tool and material processes, and other visual communication skills. Open to the general college student.

ART 113 Jewelry Design (0-6-3)
Prerequisite: Departmental Approval
Jewelry design is a studio course involving the relationship of idea and design to the tool and material process of creating handmade jewelry.

ART 114 Commercial Art Fundamentals (0-6-3)
Prerequisite: None
An introduction to the basic mechanics and terminology of commercial art and graphic design through lecture, and studio practice. Emphasis on layout and design, typography, the preparation of art for printing, and use of tools and materials.

ART 115 Commercial Art Design (0-6-3)
Prerequisite: ART 114
A further study in commercial art production for advertisement. Emphasis is on innovative design from concept through to the printed product.

ART 116 Lettering for Commercial Art (0-6-3)
Prerequisite: None
Students will develop practical skills in lettering as it is used in advertising by learning the expressive and abstract qualities of letter forms. Both tradition and original styles will be included.

ART 117 Illustration (0-6-3)
Prerequisite: None
Development of illustration competence and personal style as related to the commercial art field. Various media and design assignments will be included.

ART 121 Ceramics I (0-6-3)
Prerequisite: None
A beginning studio course introducing the basic characteristics and concepts of clay for the production of aesthetic forms and utilitarian objects. Emphasis will be on limitations and possibilities of clay as a medium, development of hand-building skills and processes and the investigation into traditional and contemporary three-dimensional design concepts employed in the production of ceramic objects.

ART 122 Ceramics II (0-6-3)
Prerequisite: ART 121 or Departmental Approval
This intermediate studio course is a continuation of Ceramics I, but with a special emphasis and concentration on the following development of the continuity of idea and design and craftsmanship in the ceramics process; student ability to select design problems related to functional and non-functional ceramic objects; and involvement and refinement of new and different ceramics processes. It is assumed that the student is familiar with the basic ceramics processes. Hand built and thrown works will be required.

ART 123 Ceramics III (0-6-3)
Prerequisite: ART 121, 122, and Departmental Approval
This is an advanced studio course for the individual who is seriously considering ceramics as a major area of concentration. Development and refinement of those concepts, principles, and techniques and methods introduced in Ceramics I and II will be continued. Production of either utilitarian or non-functional ceramic ware of high quality and excellence in craftsmanship is emphasized.

ART 125 Special Studies in Ceramics (0-6-3)
Prerequisite: ART 121-123
An advanced course for students who have a keen interest in specific problems in ceramics. The student is expected to select and research the area of specialization and to put to practical application the knowledge and information gathered. Areas of specialization may include clays, glaze formulation, kiln construction, fuels, firings, advanced ceramic design. This course may be repeated twice for maximum nine hours credits.

ART 131 Drawing I (0-6-3)
Prerequisite: Departmental Approval
A beginning studio course in which the expressive and descriptive elements of drawing are examined. The course consists of various drawing experiences, dealing with a variety of subject matter, techniques, tool and material processes, and individuality of expression. It is assumed the students have a basic understanding of design concepts and principles upon beginning this course.

ART 132 Drawing II (0-6-3)
Prerequisite: ART 131
Drawing II is a continuation of Drawing I. A broad range of subject matter is considered and dealt with, and approached from realism to the non-objective. Emphasis is placed on the choice of subject matter, technique, composition, and uniqueness of individual expression.

ART 133 Figure Drawing (0-6-3)
Prerequisite: ART 131 & 132 or Departmental Approval
This studio course is designed to build competence in drawing the human figure. Exploration and examination of the human

figure through the use of various drawing concepts, tool and material processes and techniques are stressed throughout the course.

ART 141 Painting I (0-6-3)
Prerequisite: Departmental Approval
A beginning painting studio course consisting of experiences in solving visual problems with traditional and contemporary design concepts, techniques and materials.

ART 142 Painting II (0-6-3)
Prerequisite: ART 141
This intermediate painting studio course is a continuation of those visual concepts, processes and techniques taught in Painting I. A special emphasis is placed on the student's interpretation, continuity, and maturity of idea, technique and design.

ART 143 Painting III (0-6-3)
Prerequisite: ART 141 & 142
Continuation of Painting II, but more of a directed individual study with the student determining, under the instructor's guidance, the problems to be solved. Several major works are expected by the end of the quarter.

ART 145 Special Studies in Painting (0-6-3)
Prerequisite: ART 141-143
An advanced studio course in Painting in which the student, with the instructor's approval, selects an area of specialization. These areas may include research and application of a material and tool processes, advanced composition and color theory, and idea development. This course may be repeated twice for maximum nine hours credit.

ART 151 Sculpture I (0-6-3)
Prerequisite: None
Introduction to use of materials and tools with emphasis on technique and craftsmanship. Clay plaster, oxyacetylene welding, arc welding, and basic metal casting are investigated.

ART 152 Sculpture II (0-6-3)
Prerequisite: ART 151
Continuation of ART 151 with more involvement in sculptural concepts, development of sculpture through knowledge of technique, development of individual ideas.

ART 153 Sculpture III (0-6-3)
Prerequisite: ART 151, 152
Continuation of ART 152 with more freedom in choosing main area of involvement. Students may elect to work in a variety of materials such as wood, stone, plastics, terrecotta, steel cast aluminum, bronze, etc. Emphasis will be placed on sculptural concept.

ART 155 Special Studies in Sculpture (0-6-3)
Prerequisite: ART 151-153 and Departmental Approval
Student's work should show some development of sculptural concept and demonstrate control of materials. Student must have the ability and direction to work independently. Criticism or conferences with instructor are weekly. The develop-ment of working habits and techniques should coincide with his intentions. This course may be repeated twice for maximum of nine hours credit.

ART 161 Graphics I (0-6-3)
Prerequisite: None
Graphics I is a beginning studio course in the intaglio painting process. An emphasis is placed on introducing the student to basic printing concepts and methods used in the intaglio process: such as etching, engraving, collagraphy, et cetera. Students will also have an opportunity to study and learn the use of variety of printing tools, equipment, and materials.

ART 162 Graphics II (0-6-3)
Prerequisite: ART 161
An intermediate studio course in printmaking. Graphics II students will concentrate on the techniques, materials, and methods used in serigraphy, or silkscreen, printing. In addition, students will continue to explore concepts and methods used in the intaglio and relief processes. Emphasis will be placed on technical skills, maturity of idea, and sensitivity to the media.

ART 163 Graphics III (0-6-3)
Prerequisite: ART 161 and ART 162
A continuation of Graphics II, but a directed individual study of student's choice of method (intaglio, relief, or serigraphy) is stressed. Emphasis will be placed on individual imagery, technical skills, and sensitivity to the media.

ART 165 Special Studies in Graphics (0-6-3)
Prerequisite: ART 161-163
An advanced course for the well-motivated print making student, taught entirely on an individual basis. The student is expected to select a narrow field of study, involving one printmaking process, i.e., intaglio, relief, or serigraphy. Working closely with the instructor, the student will endeavor to master the necessary technical skills in the chosen area, achieve a mature indi-vidual imagery, and experiment with new, innovative approaches for printmaking in that area. This course may be repeated twice for maximum nine hours credit.

ART 215 Commercial Art Techniques (0-6-3)
Prerequisite: ART 114
A more specialized study in commercial art with emphasis on techniques unique to printed reproduction.

ART 290 Seminar/Workshop (1-0-1)
Prerequisite: None
A workshop in which a specialized area of the visual arts is studied in a concise time period. Must meet 11 hours.

Automotive & Diesel Mechanics

AUT 1101 Automotive Engines (3-12-7)
Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in automotive repair work. Study of the construction and operation of components of automotive engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1102 Auto Electrical (6-9-9)
A thorough study of the electrical system of the automobile including wiring, AC & DC generators, ignition systems, standard and electronic distributors, batteries, and starters. Electrical and electronic equipment will be used to diagnose problems.

AUT 1103 Automotive Power Train Systems (3-12-7)
Principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

AUT 1104 Automotive Servicing (6-9-9)
Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component sys-tems of the automobile. Trouble-shooting of automotive systems, providing a full range of testing, adjusting, repairing and replacing experiences.

AUT 1112 Auto Fuels (4-6-6)
A thorough study of the fuel system of the automobile including internal and external carburetor adjustments. Electrical and electronic equipment will be used to diagnose problems in carburetors, fuel pumps, fuel injectors, and emission control systems.

AUT 1113 Automotive Chassis And Suspensions (3-3-4)
Principles and functions of the components of the automotive chassis. Practical job instruction in adjusting and repairing of suspension, steering and braking systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, front end types and servicing of brakes.

AUT 1133 Auto Air Conditioning (4-3-5)
Prerequisite: None
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. (Formerly AUT 1123)

AUT 1154 Introduction To Diesel Engines (3-6-5)
Study of the construction and operation of components to Diesel engines. Testing of engine performance. Fuel, exhaust, and cooling systems. Methods of testing and trouble shooting on Diesel engines.

AUT 1164 Braking Systems (3-3-4)
A complete study of various braking systems employed on automobiles and trucks. Emphasis is placed on how they work and proper adjusting techniques and replacement.

Biology

BIO 091 Biology Fundamentals (5-0-5)
Prerequisite: None
A basic level non-laboratory course in fundamental concepts of biology, including living systems, the cell, reproduction and genetics, properties and aggregations of organisms. This is a self-paced individualized course for which a grade of "S" is given each quarter until course requirements are completed.

BIO 101 General Biology (5-3-6)
Prerequisite: None
A course which stresses biology as a conceptual Unit through the study of cellular and protoplasmic organization, growth, differentiation, ecology, genetics, and the process of evolution.

BIO 102 General Botany (4-4-6)
Prerequisite: BIO 101
A study of the morphology, physiology, taxonomy, genetics, evolution and ecology with emphasis on flowering plants and conifers.

BIO 103 General Zoology (4-4-6)
Prerequisite: BIO 101
A study of the anatomy, physiology, evolution, taxonomy and ecology of animals with special emphasis on the vertebrates.

BIO 104 General Microbiology (4-4-6)
Prerequisite: BIO 101
An introductory course covering the fundamental principles and techniques of micro-biology with emphasis on morphology, physiological processes, and parasitic implications of microorganism (bacteria, molds, yeast, viruses, rickettsiae, protozoa, and algae), method of control, and applied microbiology.

BIO 105 Ecology of Man (5-2-6)
Prerequisite: BIO 101, BIO 121, or GEO 101
A course which examines the past and present relationships of man with his biological environment. Consideration will be given to ecological concepts, population growth, pollution, human variation, and conservation of natural resources.

BIO 110 Integrated Paramedical Biology (5-2-6)
Prerequisite: None
An integrated study of anatomy and physiology and infectious and noninfectious diseases, with emphasis on the clinical setting; a course designed for programs requiring comprehensive rather than extended study of these areas.

BIO 121 Anatomy and Physiology I (3-2-4)
Prerequisite: None
An integrated study of the chemical, cellular and tissue levels of organization, followed by the anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems.

BIO 122 Anatomy and Physiology II (3-2-4)
Prerequisite: BIO 121
An integrated study of nutrition, metabolism and development, and the anatomy and physiology of the endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems.

BIO 124 Bacteriology and Pathology (4-2-5)
Prerequisite: BIO 122
A study of genetic diseases, other noninfectious diseases, and microbial diseases with emphasis placed on the biology of bacteria, including some general laboratory techniques.

BIO 205 Conservation of Natural Resources (3-0-3)
Prerequisite: None
Problems and techniques of conserving water, soil, minerals, plants, animals, and human resources. This course is also offered as GEO 205.

BIO 210 Field Biology (1-4-3)
Prerequisite: BIO 101
A course designed to introduce a variety of techniques used to study Biology in the outdoors. Consideration will be given to soils, water, plants, animals, and climate in a selected study area.

BIO 1212 Human Biology (2-4-4)
Prerequisite: Admission to LPN Program
An integrated study of the chemical, cellular, and tissue levels of organization, followed by the anatomy and physiology of the integumentary skeletal, muscular, and nervous systems.

BIO 1222 Human Biology (2-4-4)
Prerequisite: BIO 1212
An integrated study of nutrition, metabolism, and development followed by the study of the anatomy and physiology of the endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive sys-tems.

Business

BUS 101 Beginning Typewriting (2-3-3)
Prerequisite: None
General theory and techniques in the skill of typewriting are stressed, as well as mastery of the keyboard operation, care of the machine, letter styles, short manuscripts, and drills on simple tabulation.

BUS 102 Intermediate Typewriting (2-3-3)
Prerequisite: BUS 101 or typing proficiency
Extensive drill on business letter styles, carbon copies, tabulations, and business forms. Emphasis on accuracy in continuity writing; production typewriting drills with emphasis on mailability.

BUS 103 Advanced Typewriting (2-3-3)
Prerequisite: BUS 102
Advanced problems in business forms and reports; composition; review and basic theory and techniques; development of maximum speed and accuracy in all phases of the typewriting skill.

BUS 104 Introduction to Business (5-0-5)
Prerequisite: None
A general course covering modern business activities including forms and structures of organizations, marketing, finance, management, business risks, and the relation of government to business.

BUS 107 Office Management (5-0-5)
Prerequisite: None
Designed to enable students to understand and apply the basic principles relating to efficient office management, this course includes organization, planning and control of physical factors, and personnel practices.

BUS 108 Business Communications (5-0-5)
Prerequisite: ENG 101
Prerequisite or co-requisite: BUS 101
This course is designed to assist the stu-

dent in developing an awareness of the role communications play in the business environment and to increase his skill in using the English language in writing business letters that will project the company image to the public effectively and that will strengthen management-employee understanding.

BUS 109 Secretarial Practice (2-3-3)
Prerequisite: BUS 102
This course is designed to acquaint the student with the responsibilities encountered by a secretary during the work day. Some of these responsibilities include the following: receptionist duties, handling the mail, using the business library, the purchasing of supplies, and copying and duplicating processes.

BUS 111 Business Mathematics (5-0-5)
Prerequisite: None
Basic math involving arithmetic processes, fractions, and aliquot parts will be taught traditionally. Electronic calculators will then be used to solve problems involving checking accounts, payroll, percentage, interest, notes, consumer loans, analyzing accounting statements, markup and depreciation.

BUS 112 Business Report Writing (5-0-5)
Prerequisite: ENG 101
Key steps in preparing reports required of men and women in business—problem definition, research, planning, development, and design. To prepare students for report writing that leads to decision making.

BUS 120 Personal Finance (5-0-5)
Prerequisite: None
This course is designed to enable the student to analyze and direct his own financial affairs. The course includes the study of money management, insurance, principles of budgeting, investment principles, retirement, borrowing, housing and stocks.

BUS 121 Principles of Management (5-0-5)
Prerequisite: None
An introductory course in management that includes basic theories of management. The major functions—planning, organizing, staffing, directing, and controlling — are carefully integrated with case studies and analyses.

BUS 155 Transportation Seminar (3-0-3)
Prerequisite: None
A seminar covering contemporary problems in transportation from the carrier, shipper, and federal government viewpoints.

BUS 162 Fundamentals of Real Estate (5-0-5)
Prerequisite: None
This introductory course is designed to introduce students to the real estate industry. Fundamental principles and theories of real estate are covered including terminology, Real Estate Licensing Law, ethics, and organizational structure. Financing, appraising and law, and listing and closing real estate.

BUS 163 Fundamentals of Real Estate II (5-0-5)
Prerequisite: BUS 162
This introductory course is a continuation of BUS 162, Fundamentals of Real Estate I. The student will study theory and practice of real estate. Topics discussed include fundamental operation of real estate, the real estate industry and its relationship to financing, appraising and law, listing and closing of real estate and building construction. Upon completion of this course, the student will have met the educational requirements of the North Carolina Real Estate Licensing Board for admission to the real estate broker licensing examination.

BUS 164 Real Estate Law (5-0-5)
Prerequisite: BUS 162 or Salesman's or Broker's License
A survey course of real estate law including legal aspects of the sale, purchase, and management of real property. Special emphasis is placed on the legal steps required to handle a real estate transaction from the preparation of the listing contract to the closing of the sale.

BUS 165 Speedwriting I (5-0-5)
Prerequisite: ENG 101
A study of the theory of Stenoscript with emphasis on reading and drill in rapid execution and recall. Some dictation practice is provided. Non-Stenoscript and transcription factors are studied.

BUS 166 Speedwriting II (5-0-5)
Prerequisite: BUS 165
A systematic review of stenoscript theory with emphasis on skill building through dictation practice.

BUS 167 Small Business Management (5-0-5)
Prerequisite: None
This course provides small business owners and managers with training in the knowledge, skills, and tools of management suitable to their specific needs in the areas of organization, finance, marketing, sales and promotion, risk and insurance, record keeping, personnel management, government regulations, taxes and related areas.

BUS 201 Beginning Shorthand (5-0-5)
Prerequisite: None
A study of the theory of Gregg shorthand, Series 90, with emphasis on reading and drill in rapid execution and recall on both familiar and unfamiliar material. Dictation practice is provided. Non-shorthand and transcription factors are studied.

BUS 202 Intermediate Shorthand (5-0-5)
Prerequisites: BUS 101, BUS 201 or proficiency
A systematic review of Gregg shorthand theory with emphasis on skill building through dictation practice and transcription.

BUS 203 Advanced Shorthand (5-0-5)
Prerequisite: BUS 202
A continuation of Intermediate Shorthand with emphasis on rapid dictation and transcription development.

BUS 204 Advanced Shorthand-Executive (5-0-5)
Prerequisite: BUS 203
This high speed dictation and transcription course is designed for Executive Secretarial students, with emphasis on business vocabulary dictation.

BUS 205 Advanced Shorthand-Legal (5-0-5)
Prerequisite: BUS 202
This course is designed to give the legal secretarial student knowledge and understanding of terms commonly used in the legal profession. Emphasis is placed on spelling, pronouncing, and defining legal terms. Dictation and transcription practice are provided.

BUS 206 Advanced Shorthand-Medical (5-0-5)
Prerequisite: BUS 202 and MOA 100
This dictation and transcription course is designed for Medical Secretarial students with emphasis on medical vocabulary, medical vocabulary dictation, and medical office simulations.

BUS 208 Word Processing (2-3-3)
Prerequisite: ENG 101 and BUS 102
Instruction is given to students in alphabetic and other filing systems and in the operation of transcribing equipment, the IBM Memory typewriter, and the IBM Electronic typewriter with proportional spacing.

BUS 209 Business Law (5-0-5)
Prerequisite: None
A study of the history of law, the social objectives of law, civil law, criminal law and court procedure. A detailed study of contracts concludes the course. Several digests and decided cases are studied with each topic to make the discussion of principles specific and meaningful.

BUS 210 Business Law (5-0-5)
Prerequisite: BUS 209
A continuation of BUS 209. This course primarily includes a study of commercial paper and sales law. Digests and case studies are used extensively.

BUS 213 Principles of Finance (5-0-5)
Prerequisite: ACT 202
Study of the financial function of the business enterprise with special emphasis on capital budgeting and the rate of return. Sources and uses of funds included with study conducted from the standpoint of the financial manager.

BUS 214 Real Estate Finance (5-0-5)
Prerequisite: BUS 162 or Department Approval
A study of real estate finance including an analysis of financial techniques and instruments necessary in real estate financing. Topics include the structure of the mortgage market, the sources of funds, types of mortgages, role of government agencies, interest rates, loan organization and servicing, and competition in the money market.

BUS 233 Personnel Management (3-0-3)
Prerequisite: None
Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security.

BUS 242 Human Relations in Business (3-0-3)
Prerequisite: None
Emphasis on creating positive human relations in business by acquiring knowledge of concepts, skills, and techniques for managing individual, group and organizational relationships;relationships across cultures; and yourself.

BUS 251 Principles of Insurance (5-0-5)
Prerequisite: BUS 104
Survey of risk, risk management, role of insurance, structure and operations of the insurance business, and all lines of life, health, property, and liability insurance coverage.

BUS 272 Principles of Supervision (3-0-3)
Prerequisite: None
Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 290 Seminar/Workshop (1-0-1)
Prerequisite: None
A workshop in which a specialized area of

Business is studied in a concise time period. Must meet eleven hours.

BUS 292 Real Estate Appraisal (5-0-5)
Prerequisite: BUS 162 or Salesman's or Broker's License
A study of the principles and theory of appraising real property. Topics include site evaluation, building materials and components, methods of appraising property, which include the income approach, the market approach, and the cost approach.

BUS 1104 Small Business Management (3-0-3)
An introduction to the Business world, problems of small business operation, basic business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

Chemistry

CHM 090 Fundamentals of Chemistry (3-0-3)
Prerequisite: None
This course essentially provides the non-laboratory high school basic level of chemistry for those who have no prior study of chemistry. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

CHM 100 An Introduction to Chemical Concepts (3-0-3)
Prerequisite: None
This course is primarily designed to provide an introduction to college chemistry courses for those who have not obtained an adequate background and for students investigating the nature of chemistry courses. Performance on the ACS High School Chemistry Exam will be used to indicate a student's need for the course.

CHM 101 Principles of Chemistry (4-6-6)
Prerequisite: MAT 101 or eligibility to enroll MAT 101
A course designed for the student who intends to major in chemistry or who wishes credit in physical science to meet graduation requirements. The course meets the needs of those in pre-medical, pre-dental, pre-engineering, and other pre-science curricula.

CHM 102 Principles of Chemistry (4-6-6)
Prerequisite: CHM 101
A continuation of CHM 101. The laboratory includes Qualitative Analysis.

CHM 107 Quantitative Analysis (3-9-6)
Prerequisites: CHM 101, 102
A course in the theory and practice of classical volumetric and gravimetric analysis with an introduction to modern instrumental analysis.

CHM 211 Organic Chemistry (4-4-6)
Prerequisite: CHM 102
The presentation of the classification, nomenclature, reactions, bonding, and reaction mechanisms of the compounds of carbon.

CHM 212 Organic Chemistry (4-4-6)
Prerequisite: CHM 211
A continuation of CHM 211.

Civil Engineering Technology

CIV 101 Surveying I (3-6-5)
Corequisite: MAT 111
Principles and practices of obtaining horizontal, vertical, and angular measurements; care and use of instruments; azimuths and bearings; introduction to construction surveys and earthwork.

CIV 103 Surveying II (3-6-5)
Prerequisite: CIV 101
Topographic surveying, division of land, celestial observations, introduction to curves, field adjustments of transits and levels.

CIV 201 Surveying III (3-3-4)
Prerequisites: CIV 103, MAT 113
Reconnaissance, preliminary and location surveys; theory and application of simple, compound, and reverse circular curves; spirals, parabolic vertical curves; earthwork calculations.

CIV 211 Properties of Engineering Materials (2-3-3)
Prerequisite: EGR 103
Corequisite: EGR 201
A study of the more important mechanical and physical properties, the essential information concerning the sources and manufacture of the principal construction materials.

CIV 212 Construction Methods and Equipment (3-3-4)
Prerequisite: None
Planning and management of construction projects; hauling and excavating equipment; proper selection of equipment for job conditions; belt conveyors, quarrying, tunneling, piles; other heavy construction practices; time and cost studies.

CIV 223 Construction Estimates and Costs (3-3-4)
Prerequisite: CIV 212
Methods of constructing wood, steel, and concrete buildings; analysis of plans and

specifications for construction requirements; preparation of cost estimates.

CIV 231 Contracts and Specifications (3-0-3)
Prerequisite: None
Basic engineering law; owner, engineer, contractor relations and responsibilities; contract performance requirements, competitive bidding procedures; preparation and interpretation of specifications.

CIV 232 Soils & Foundations (3-3-4)
Prerequisite: MAT 112
A study of the origin, composition, and the basic engineering properties of soil, the significance of laboratory and field testing of soil materials; three soil classification systems in common use, and procedure for soil compaction and soil stabilization; basic theory of soil strength tests, plate bearing tests and earth embankment slope studies.

CIV 242 Properties of Concrete (3-3-4)
Prerequisite: MAT 112
An intensive study of the composition and properties of concrete; proportioning of concrete mixes; control and testing of varied concretes; field inspection of concrete manufacturing, placing, and curing.

CIV 251 Basic Environmental Technology (3-3-6)
Prerequisites: CIV 211, CIV 232
An introduction to the basic principles of water quality standards, water purification and distribution, waste-water collection, and the operation of water treatment and waste-water treatment plants.

CIV 253 Basic Hydrology (2-3-3)
Prerequisite: CIV 201
An introduction to the basic principles of hydrology including specific areas of hydraulics, water and waste-water treatment, hydrologic cycle climate, rainfall, rainfall runoff analysis, and statistical evaluation of pertinent data.

CIV 263 Basic Structural Design (3-3-4)
Prerequisites: DFT 112, EGR 201
A study of the basic principles of design of steel, timber, and reinforced concrete structures by application of principles of mechanics and various codes. Labs shall consist of structural design problems and basic structural drafting technique.

Criminal Justice

CJC 101 The Criminal Justice System & Process—Police & Corrections (5-0-5)
This course introduces the student to the Criminal Justice System—Police, Courts, and Corrections—and the Criminal Process. It deals with two of the components of the system—police and corrections—in depth. The course includes the historical development and present status of these components.

CJC 110 Introduction to Criminology (5-0-5)
Prerequisite: None
The study primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. The course examines the theories behind the "whys" of criminal behavior and seeks to find solution for criminal behavior of c groups and individuals in society.

CJC 115 Criminal Law (5-0-5)
Prerequisite: None.
This course deals with crimes against the person, property, habitation, public decency, the administration of justice, and public disorder. The course includes the concept of criminal responsibility, corpus delicti, and the specific crimes of homicide, assault, robbery, kidnapping, arson, burglary, attempts to commit a crime, solicitation, theft, and sexual offenses. Leading cases are reviewed and discussed.

CJC 117 Constitutional Law I (5-0-5)
Prerequisites: CJC 115, CJC 101, or CJC 201
Due process—the fourth, fifth, sixth, eighth, and fourteenth amendments—is covered in this course by an analysis of the past and present decisions dealing with these amendments. Also dealt with in this course are the exclusionary rule, stop and frisk laws, preliminary hearings, indictments, and informations. The identification process, habeaus corpus hearings, extradition, double jeopardy and eavesdropping-wiretapping and bugging are also covered.

CJC 118 Constitutional Law II (5-0-5)
Prerequisite: CJC 117
A continuation of CJC 117. Due process, the fourth, fifth, sixth, eighth, and fourteenth amendments. An analysis of the past and present decisions dealing with these amendments. Also, the exclusionary rule, stop and frisk laws, preliminary hearings, indictments, and informations.

CJC 201 The Criminal Justice System & Process-Courts (5-0-5)
Prerequisite: None
This course familiarizes the student with the structure of the Federal and State Court systems and criminal process. The course includes the role of the court personnal—Judge, bailiff, court clerk, prosecutor and defense counsel. Emphasis is placed on the judicial process from initial appearance to post conviction remedies: Jurisdiction, venue, bail, release on recognizance, preliminary hearings, grand jury, plea negotiations, arraignment, pretrial

motions, discovery, jury trial, sentencing, appeal, and juvenile court and process are discussed.

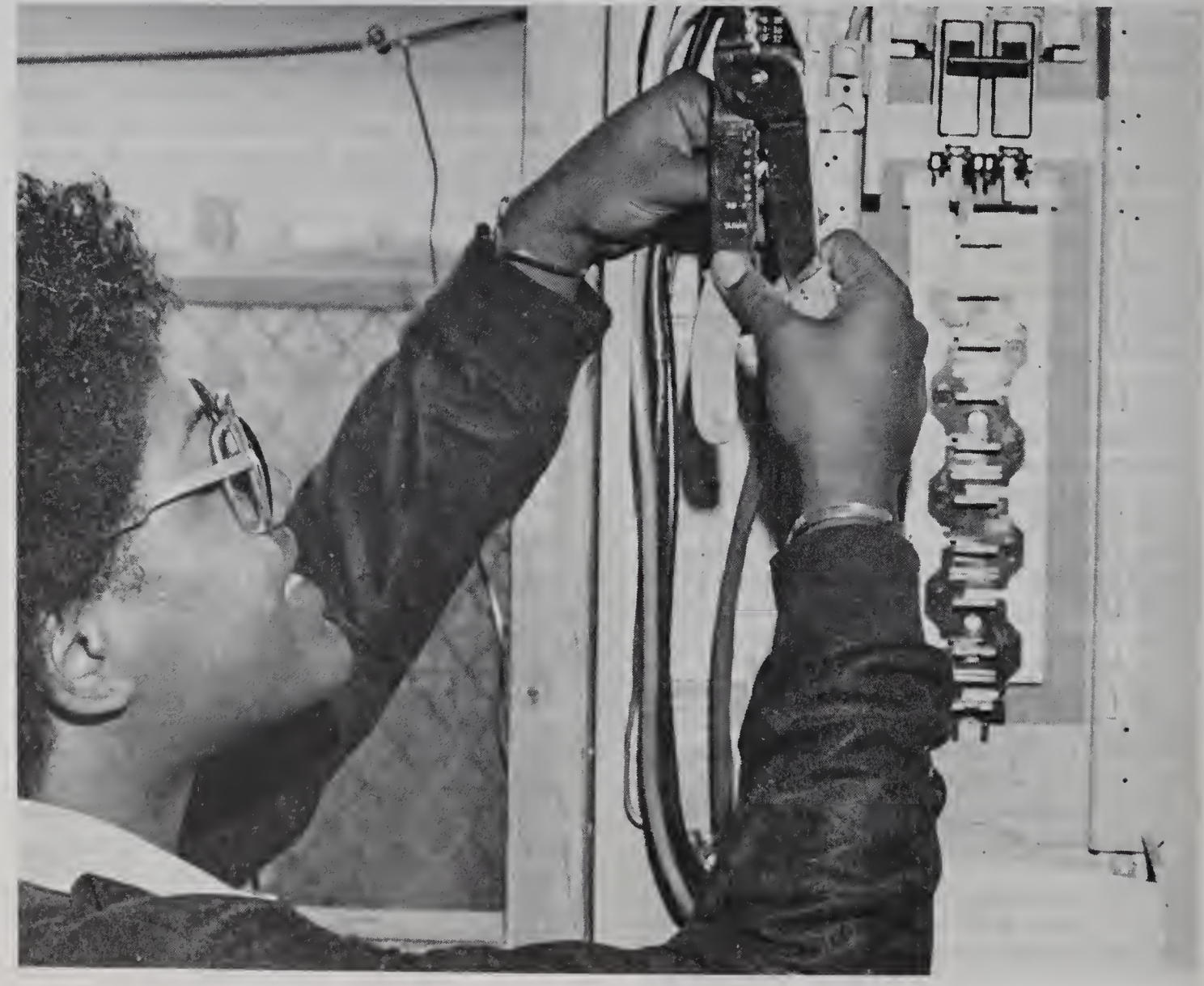
CJC 205 Criminal Evidence (5-0-5)
Prerequisite: CJC 101, 201, 117, and/or 115
To establish a foundation for the student in understanding the meaning and importance of evidence; topics include, but are not limited to, direct, circumstantial, and real evidence, the relevancy, materiality and competency of evidence, the hearsay rule and its exceptions, opinion evidence, character evidence, judicial notice, rebuttable and conclusive evidence, ordinary and expert witnesses, impeachment of witnesses, privileged communications, secondary evidence, etc. Leading cases are reviewed and discussed.

CJC 210 Criminal Investigation(5-0-5)
Prerequisite: None
This course introduces the student to fundamentals of investigation; crime scene search, collection, preservation of evidence; sources of information; interview and interrogation; case preparation and court presentation; and the investigation of specific offenses such as arson, narcotics, sex, larceny, burglary, robbery and homicide.

CJC 211 Criminalistics (4-2-5)
Prerequisite: CJC 210
Continuation of the study of criminal investigation including a general survey of the methods and techniques used in modern scientific investigation of crime, with emphasis upon the practical use of these methods by the students. Laboratory techniques will be demonstrated and the student will participate in practical application of the scientific equipment.

CJC 220 Criminal Justice Organization and Management (5-0-5)
Prerequisite: None
Introduction of principles of organization and administration: emphasis on personnel management, police management, training, management theory, communication, records, planning and budgeting.

CJC 262 Issues in Criminal Justice (5-0-5)
Prerequisite: None
This course focuses on discussions of a variety of current topics of law enforcement and the criminal justice system. Topics could include: police unions, white-collar crime, police education, ethics, professional standards, deviant behavior, etc.



Data Processing

DAP 121 Fortran Programming I(3-4-5)
Prerequisite: Departmental Approval
A fundamental course in computer programming. The FORTRAN IV compiler language will be used to develop program logic and write computer programs to solve sample problems.

DAP 141 Introduction to Cobol Programming (3-4-5)
Prerequisite: None
The COBOL language will be used to develop the program logic needed to solve a representative sample of business problems. The students will also write, compile, correct their errors, and test their solutions to the above problems. (This course was formerly taught as DAP 241.)

DAP 142 Advanced Cobol Programming (3-4-5)
Prerequisite: DAP 141
The complete capabilities of COBOL will be used to solve sample business problems. Emphasis will be placed on creating indexed files then updating, maintaining and producing reports from these files.

DAP 150 Computer Fundamentals (3-2-4)
Prerequisite: None
A fundamental overview of electronic data processing and the computer's ever increasing role in modern society. Concepts of computer programming, data communications, computer systems, word processing, data collection, information organization, and distribution will be investigated. Students will write several simple computer programs in the BASIC programming language. (This course was formerly taught as DAP 111.)

DAP 155 Computer Concepts (5-0-5)
Prerequisite: None
A course that provides a basic understanding of the internal representation of data, computer components, number systems, and data manipulation. Emphasis will be placed on the IBM 3081 to illustrate operating systems, machine instruction formats, and electronic data representation. (This course was formerly taught as DAP 112.)

DAP 171 Introduction to Basic Programming (3-4-5)
Prerequisite: None
The BASIC language will be used to develop the logic needed to solve a representative sample of business problems. The students will also write, compile, correct their errors, and test their solutions to the above problems. (This course was formerly taught as DAP 132.)

DAP 172 Advanced BASIC Programming (3-4-5)
Prerequisite: DAP 171
The complete capabilities of BASIC will be used to solve sample business problems. Emphasis will be placed on creating index files than updating, maintaining and producing reports from these files. students will also write BASIC programs that will produce data entry screens.

DAP 181 Introduction to RPG II Programming (3-4-5)
Prerequisite: DAP 150
The Report Program Generator Language will be used to develop the program logic needed to solve a representative sample of business problems. The student will also write, compile, correct their errors, and test their solutions to the above problems. (This course was formerly as DAP 253.)

DAP 182 Advanced RPG II Programming (3-4-5)
Prerequisite: DAP 181
The complete capabilities of RPG II will be used to solve sample business problems. Emphasis will be placed on creating indexed files then updating, maintaining and producing reports from these files.

DAP 261 Assembler Language Programming (3-4-5)
Prerequisite: DAP 155 or Departmental Approval
An introductory course to a symbolic language. The language will be taught using a particular example that emphasized the capabilities of the language. The student will be required to solve sample problems using the assembler language.

DAP 263 Introduction of PL/I Programming (3-4-5)
Prerequisite: DAP 121
The basic elements of PL/I will be used to write computer programs to solve a representative sample of simple problems.

DAP 271 Introduction to Computer Applications (1-8-5)
Prerequisite: Two (2) quarters of a computer language
In a language of their choice (COBOL, RPG II, or BASIC) the student will be given one or more small applications using indexed files. The student will be required to create indexed files then update, maintain and produce several reports from these files.

DAP 272 Intermediate Computer Applications (1-8-5)
Prerequisite: Two (2) quarters of two (2) computer languages
The student will be given several computer programs on which he must do pro-

gram maintenance. He will also be required to change programs from one computer language to another computer language, to modify programs to produce a modified report, and to correct programs containing logical and/or syntax errors.

DAP 273 Advanced Computer Applications (1-8-5)
Prerequisite: Departmental Approval
This course provides the student with the opportunity to develop, program, test, and document the installation of a significant computer application.

DAP 280 Data Communications (3-0-3)
Prerequisite: None
Analog and digital data transfer between computers and terminals as well as other peripheral devices. Alternative methods for reducing telephone line costs will be discussed. Modems, multiplexors, data concentrators, port selectors, and communications protocol will be covered.

DAP 290 Information Management (3-0-3)
Prerequisite: Departmental Approval
Introduction to professional standards and responsibilities, organizational and procedural controls, documentation standards, audit and control of batch systems recovery procedures.

DAP 291 Seminar Workshop (1-0-1)
Prerequisite: None
A workshop in which a specialized area of Computer Science is studied in a concise time period. Must meet eleven hours.

DAP 295 Computer Assisted Statistics (3-2-4)
Prerequisite: MAT 100 or MAT 101
Introduction to elementary statistics to include rules of probability, sampling, statistical inference, t, chi square, and F test, Linear regression and decision theory. The statistical packages at the Triangle University Computation Center will be used to solve applicable problems.

Drafting

DFT 101 Engineering Drawing I (0-6-2)
Prerequisite: None
The beginner is taught the use and care of instruments, freehand sketching, geometric construction, lettering techniques, orthographic and auxiliary projection, basic theory of dimensions and section.

DFT 102 Engineering Drawing II (0-6-2)
Prerequisite: DFT 101
Continuation of DFT 101 is devoted to completion of sets of working drawings.

DFT 112 Civil Drafting (0-6-2)
Prerequisites: CIV 101, DFT 101
The principles of drawing applicable to Civil Engineering Technology. Topics covered include: boundary maps, roadway maps (plan, profile, cross sections, and mass haul), contour work, structural detailing, and graphing. Drawings are done in ink and pencil on paper. Clarity and reproducibility are stressed at all times.

DFT 122 Electrical Drawing (0-3-1)
Prerequisite: DFT 101
The use of standard templates and ANSI symbols in the preparation of block diagrams, schematics, and logic diagrams for electronic devices and electrical systems.

DFT 136 Drafting and Blueprint Reading (0-6-2)
Prerequisite: None
Basic drafting techniques are covered to provide a working knowledge of drafting as a tool for communicating ideas. Reading and interpreting of blueprints is emphasized.

DFT 1101 Drafting Fundamentals (3-12-7)
An introduction to drafting and drafting practices. Instruction is given in the selection, use and care of instruments, single stroke lettering, applied geometry, and freehand sketching of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, sections, and auxiliary views will be emphasized. The study of fasteners will be studied. Dimensioning and notes will be used according to the American Standards Institute practice. Methods of drawings will be included at the appropriate time.

DFT 1102 Precision Drafting (3-12-7)
Gears and cams will be studied and drawn. Precision dimensioning and fits with the use of tolerances will be studied and used extensively according to the American Standards Institute. Military standards, company standards, and true position dimensioning practices. Detail drawings, with sections, will be most widely used.

DFT 1103 Specialized Drafting (3-12-7)
The drafting curriculum will be divided into two main phases. The student will choose to study architectural or mechanical drafting. Architectural students will design and draw a complete set of working drawings for a residence. The mechanical students will concentrate on tool design, dies, jigs and fixtures.

DFT 1104 Advanced Drafting (3-9-6)
This study will consist of special problems in mechanical or architectural drafting according to major.

DFT 1111 Blueprint Reading (0-3-1)
Interpretation and reading of blueprints.

Development of ability to read and interpret blueprints, charts, instruction and service manuals, wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1113 Descriptive Geometry (1-3-2)

Graphical analysis of space problems. The problems deal with practical design elements involving points, line, planes, connectors, and a combination of these. Included are problems dealing with solid geometry theorems. Where applicable, each graphical solution shall be accompanied by the analytical solution.

DFT 1124 Technical Illustration (1-3-2)

A study of methods used in the preparation of pictorial drawings, methods of rendering, use of paste-up techniques for parts catalogs and/or technical manuals. Drawings will be inked on polyester film or illustration board.

DFT 1132 Architectural Drafting I (4-3-7)

Prerequisite: DFT 1101
A fundamental course in drawing and designing preliminary residential floor plans and elevations. Details of design will be studied. (Formerly DFT 1122).

DFT 1133 Construction Estimating (4-3-5)

A basic course dealing with the cost of materials and labor in the construction industry. The different types of estimates and the related costs of insurance, taxes, overhead, rentals, and profit will be studied. These will be applied to actual estimating problems in a systematic procedure.

DFT 1134 Building Codes and Laws (0-3-1)

A study of the codes and laws dealing with the construction of residential, commercial, public and institutional buildings. Both state and local codes will be examined in reference to safety, inspection, and enforcement procedures.

DFT 1143 Drafting Devices and Techniques (0-3-1)

The study and use of drafting devices and techniques used in industry. Included will be the use of grids, micro-plotters and scribers, engineering manuals and standards. The engineering chain from the engineering designer to the manufacturing process will be studied.

DFT 1144 Electronics and Drafting (2-3-3)

A study is made of electricity and electronics as it relates to the drafting field. Electrical and electronic components, diagrams, and methods will be studied in relation to printed circuit boards and lighting layouts.

DFT 1153 Architectural Materials and Systems (3-0-3)

Prerequisite: DFT 1132
The building materials area is studied using Sweet's Files and Catalogs as resources. The building of floor, wall ceiling and roof systems is examined in detail.

DFT 1163 Construction Estimating (1-3-2)

Prerequisite: 1132
A basic course dealing with the cost of materials and labor in the construction industry. The different types of estimates and the related costs of insurance, taxes, overhead, rentals, and profit will be studied. These will be applied to actual estimating problems in a systematic procedure.

DFT 1173 Schematics and Diagrams (1-3-2)

A study of the electrical harness diagrams and other electrical schematic drawings used in the diesel industry. The basic techniques of using a diagram for troubleshooting will be carried out in the lab exercises.

DFT 1183 Printed Circuits and Soldering (3-6-5)

Prerequisites: ELN 1121 and ELN 1111.
Techniques of photographic and direct etching of PC boards, automated assemble systems, conformal coatings, and layout artwork. Manual and automated soldering methods for PC assembly. Desoldering and repair techniques.

Fashion Merchandising and Marketing Technology

DMK 101 Retailing (5-0-5)

Prerequisite: None
Critical analysis of retailing strategy and management with examination of selected current major problem areas unique to the retail sector of the economy. (Formerly BUS 222)

DMK 102 Fundamentals of Fashion Merchandising (5-0-5)

Prerequisite: None
An introduction to fashion merchandising, giving the student an understanding of the basic principles of fashion; how fashions begin, move, and disseminate. The course also concerns itself with how fashions may be predicted along with a basic understanding of merchandising activities and operations. Emphasis will also be placed on fashion careers.

DMK 105 Personal Development (5-0-5)
Prerequisite: None
This course is designed to enable the student to enhance and train his/her mind and body in the following areas: self-esteem and personality, physical conditioning, nutrition and diet, clothing and appearance, habits of orderliness, overall grooming, graciousness, manners, and customer awareness. This course attempts to develop the student's on-the-job potential in making the most of his or her physical, mental and emotional attributes.

DMK 109 History and Psychology of Dress (5-0-5)
This course examines the interrelationship between clothing and its cultural, social, psychological, physical, economic, and aesthetic implications. The course enables the student to build a knowledge of the role clothing plays in the development and understanding of the self and of others. The course takes a look at clothing and textiles as a medium for artistic perception, expression, and experience. It enables the student to become aware of the impact of individual clothing choices or fashion and market trends.

DMK 120 Principles of Marketing (5-0-5)
Prerequisite: None
A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process. (Formerly BUS 219).

DMK 132 Salesmanship (5-0-5)
Prerequisite: None
This is an introductory course designed to acquaint the student with the theoretical principles and practical application of modern selling. (Formerly BUS 168).

DMK 151 Principles of Transportation (5-0-5)
Prerequisite: None
An introductory course designed to orient students in the economic, social, and political aspects of transportation. An analysis of the economic characteristics of air, motor, rail, and water transportation and regulatory agencies is made. (Formerly BUS 151).

DMK 152 Traffic Management (5-0-5)
Prerequisite: None
An intermediate course in Traffic Management which is also designed as an introduction to the study of rates. Emphasis is placed on the problems and relationship between the shipper and the receiver of traffic on the one hand, and the various types of carriers on the other. Importance and place of modern industrial traffic management, traffic organizations, shipping documents, carrier liability, shipper responsibility, routing, diversion, reconsignment and transit privileges. Attention is given to the types or rates, classification, tariffs, rate bureaus and the ratemaking process. (Formerly BUS 152).

DMK 154 Transportation Law and Procedures (5-0-5)
Prerequisite: DMK 151, 152, 253 or Departmental Approval
A detailed analysis of transportation, law, appropriate court and Commissions' decisions and procedure before the Commissions. (Formerly BUS 154).

DMK 204 Fashion Design (3-0-3)
Prerequisite: None
This course is designed to develop fashion sketching techniques for promoting designs which are already complete, for illustrations in magazines, newspapers, poster design, display, etc. The course enables the students to understand different fabrics and the way they drape, develops creativity in design, and aids to understanding fashion design as it relates to the figure.

DMK 211 Fashion Show Production (5-0-5)
Prerequisite: DMK 102
This course enables the student to recognize the different objectives of various types of fashion shows and the necessary procedures and elements for their success as a promotional activity. The course culminates in an actual production put on by the students.

DMK 215 New York Field Studies Seminar (0-6-6)
Prerequisite: None
This course enables the student to spend seven days and six nights in New York with daily seminars by leading fashion professionals. The course gives the student an inside look at the fashion industry, from manufacturer to retailer.

DMK 243 Advertising (5-0-5)
Prerequisite: None
A study of the role of advertising in the American economy. Emphasis is on consideration of the elements of the advertising campaign—research budgeting, media selection, creative strategy, effectiveness measurement. Consideration is given to developing strategies, writing copy, creating art, choosing printing based on management techniques designed to achieve advertising goals and developing the ability to control and evaluate the effectiveness of advertising efforts. (Formerly BUS 220).

DMK 253 Carrier Rates (5-0-5)
Prerequisite: DMK 152
The purpose of this course is to assist the beginner in bridging the gap between the

theoretical and the practical aspects of freight tariffs. Hypothetical shipments will be rated by using the tariffs. (Formerly BUS 253).

DMK 255 Domestic Transportation Claims (5-0-5)
Prerequisite: None
A course to study the law and procedures for handling domestic loss, damage, and delay claims. Both regulated and unregulated carriers will be considered. (Formerly BUS 255).

DMK 256 International Transportation (5-0-5)
Prerequisite: None
A course which considers the nature and scope of U.S. international transportation: including water, air, rail, and highway transport. Also considered are international freight forwarders and customhouse brokers. Rate structures and regulation will also be analyzed. (Formerly BUS 256).

DMK 260 Visual Presentation (3-0-3)
Prerequisite: None
This course examines "display" as a visual merchandising medium, and covers the principles of display design and their applications to fashion. Practical experience will be the major emphasis of the course.

Drama

DRA 101 Introduction to Theatre (3-0-3)
Prerequisite: None
This course is an exploration of the theatre as an art form: how the actor, director, and designer function. Outstanding plays of major periods are used to demonstrate the technical and aesthetic aspects of theatrical production.

DRA 102 Oral Interpretation (3-0-3)
Prerequisite: None
A course designed to promote the student's skill in interpreting and presenting various selections from literature, poetry, and plays. Students are given an opportunity for delivery of selections of their own choice.

DRA 103 Acting I (1-4-3)
Prerequisite: ENG 103 or Departmental Approval
This course is designed to train the actor to convey thought and emotion through the use of the body and the voice. Mime, oral exercises and improvisations are studied.

DRA 104 Play Production I (0-9-3)
Prerequisite: DRA 101 or Departmental Approval
This course provides students with guided practice in producing a play for audience approval. Students are required to play roles and serve on at least one of the following committees: scenery, sound, property, lighting, costume, publicity, or make-up.

DRA 105 Play Production II (0-9-3)
Prerequisite: DRA 101 or Departmental Approval
This course provides students with guided practice in carrying out responsibilities in play production under the pressure of preparing plays for audience approval. Students enrolled may expect to play roles and serve as members of the scenery, sound, property, lighting, costume, publicity or make-up staffs.

DRA 106 Stage Crafts (1-4-3)
Prerequisite: DRA 101 or Departmental Approval
This course is designed to familiarize the student with all the theatre crafts including scenery construction and painting property construction and acquisition, stage lighting and sound.

DRA 107 Stage Make-up (1-2-2)
Prerequisite: None
The student will study and practice creating straight, middle-age, old-age, and character make-ups.

DRA 201 History of Theatre—Ancient (3-0-3)
Prerequisite: DRA 101 or Departmental Approval
This course is a study of the specific conditions under which the great plays of the world have been produced. Consideration of audience, actors, physical conditions, social conditions, and playwright are studied. Representative plays are studied from the Ancient to the Renaissance Period.

DRA 202 History of Theatre—Renaissance (3-0-3)
Prerequisite: DRA 101 or Departmental Approval
This course is a study of the specific conditions under which the great plays of the world have been produced. Consideration of audience, actors, physical conditions, social conditions and the playwright are studied. Representative plays are studied from the Renaissance to the Realistic Period.

DRA 203 History of Theatre—Realistic (3-0-3)
Prerequisite: DRA 101 or Departmental Approval
This course is a study of the specific conditions under which the great plays of the world have been produced. Consideration of audience, actors, physical conditions, social conditions, and the playwright are studied. Representative plays are studied from Realistic Period to the present.

DRA 204 Play Production III (0-9-3)
Prerequisite: DRA 101 or Departmental Approval
This course provides students with guided practice in carrying out responsibilities in play production under the pressure of preparing plays for audience approval. Students enrolled may expect to play roles and serve as members of the scenery, sound, property, lighting, costume, publicity, or make-up staffs.

DRA 205 Play Production IV (0-9-3)
Prerequisite: DRA 101 or Departmental Approval
This course provides students with guided practice in carrying out responsibilities in play production under the pressure of preparing for audience approval. Students enrolled may expect to play role and serve as members of the scenery, sound, property, lighting, costume, publicity or make-up staffs.

DRA 206 Costuming for the Stage (1-4-3)
Prerequisite: DRA 101 or Permission of Instructor
This course is a study of historical costume styles in relation to costuming for the modern theatre.

Diesel Vehicle Maintenance

DSE 1101 Diesel Engines (3-12-7)
Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in diesel repair work. Study of the construction and operation of components of diesel engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams, and camshafts, fuel and exhaust systems, cooling systems, proper lubrication; and methods of testing; diagnosing and repairing.

DSE 1102 Electrical Systems (3-6-5)
A thorough study of the theory and operation of various farm and heavy equipment electrical systems including 24 volt starting and charging systems. Maintenance and testing procedures, diagnosis and repair of all types of electrical/electronic components, especially the transistor circuits found on modern heavy-duty equipment.

DSE 1103 Power Trains I (3-6-5)
The objectives of the course include the following: to give the student a basic understanding of power trains; to give the student practice in determining the nature of troubles developed in various component parts; to help the student understand the various types of systems and how they work; and to promote a full knowledge of adjusting, repairing and replacing different components and/or parts.

DSE 1104 Power Trains II (3-6-5)
Principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

DSE 1111 Diesel Fuels (3-6-5)
A thorough study of the fuel system of the diesel including internal and external repair of pumps and injectors. Electrical and electronic equipment will be used to diagnose problems in fuel pumps, fuel injectors, and emission control systems. Special tools and instruments used in maintenance and repair will be presented.

DSE 1113 Chassis and Suspensions (3-3-4)
Principles and functions of the components of the chassis. Practical job instruction in adjusting and repairing of suspension and steering. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end types.

DSE 1114 Diesel Servicing (3-9-6)
This course includes instruction in shop procedures necessary in determining the nature of trouble developed in various component systems. Trouble-shooting of all systems provide a full knowledge of all testing, adjusting, repairing, and replacing.

DSE 1124 Air Conditioning (3-3-4)
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.

DSE 1132 Braking Systems (1-6-3)
A complete study of various braking systems that are used in construction equipment, road vehicles, and farm equipment. Emphasis is placed on how they work and proper adjusting techniques and replacement.

DSE 1143 Hydraulic and Pneumatic Systems (3-3-4)
This course deals with hydraulic and pneumatic systems that are used in construction equipment, road vehicles, and farm equipment. It covers basic theories, construction, adjustment, and repair of hydraulic and pneumatic systems.

Economics

ECO 201 Principles of Economics (5-0-5)
Prerequisite: None
A study of macroeconomic principles, problems, and issues with emphasis on the applications in the United States economy.

ECO 202 Principles of Economics (5-0-5)
Prerequisite: ECO 201
A continuation of ECO 201. A study of the microeconomic principles, problems, and issues with applications to United States consumers and business firms.

ECO 209 Money & Banking (5-0-5)
Prerequisite: ECO 201
A study of money, its nature and history, the commercial banking process, the structure and operations of the Federal Reserve System, significance and measurement of money and the national income, review of U.S. monetary policy, financial institutions other than commercial banks, and international banking.

ECO 211 Engineering Economics (3-0-3)
Prerequisite: MAT 112
A general survey of engineering economics, engineering economy studies, factors determining present economy, interest and annuity relationships, depreciation and valuation, financing engineering enterprises, and basic economy study patterns.

Education

EDU 101 Introduction to Early Childhood Education (4-2-5)
Prerequisite: None
An introduction to the various types of child-care provided for pre-school children. Emphasis will be placed upon understanding the concepts of readiness, motivation, and discipline as well as upon planning techniques for lessons and experiences which are appropriate to child's developmental stage. Consideration will be given to developing professional attitudes and behavior.

EDU 103 Career Planning (2-0-2)
Prerequisite: None
A course designed to aid students to assess their abilities and interest in order to make a more meaningful choice. Tests will be administered to assess the students interests and abilities in planning their educational needs.

EDU 104 Career Planning (2-0-2)
Prerequisite: None
A continuation of EDU 103. Exploring occupations, written job applications, resumes, job interviews and educational planning in the world of work.

EDU 106 Practicum: Early Childhood Education (1-4-3)
Prerequisite: Permission of Department Approval
Practicum in teaching/learning. Includes a one-hour seminar each week plus field experience. Each student will be assigned to a qualified teacher and will be directly involved in special assignments (e.g. tutoring, setting up learning centers, presentation of small and large group activities.) This course is designed to be a terminal course.

EDU 113 The Behavior of Children (4-2-5)
Prerequisite: None
The course will deal with the "whole child" in terms of his interaction with the social, emotional and physical aspects of his world. Behavior of children will cover pre-natal development through the middle years of childhood. Stress will be placed on real life situations as well as academic proficiency. Course is particularly designed for individuals who plan on working with pre-school age children.

EDU 114 Health & Safety for Young Children (2-2-3)
Prerequisite: None
This course will deal with all aspects of health (physical, mental, emotional) and safety for young children. Emphasis will be placed on the construction of teaching units for use with young children.

EDU 116 Communicating with the Young Child (4-2-5)
Prerequisite: None
Study of language development in relation to adult models and the child's early experiences. Remedial approaches to improving the student's oral communication, in order to serve as an effective model. Case studies provide opportunities to analyze problems of adult-child communication and to derive guidelines for establishing effective communication patterns with young children.

EDU 190 Workshop in Stories for Young Children (1-0-1)
Prerequisite: None
This course will deal with the art of presenting literature to young children. Stress will be placed upon storytelling and oral reading as well as the importance of literature in helping children develop sex-role identification, achievement motivation, career awareness, and emotional security. This course is designed to be a terminal course.

EDU 191 Workshop in Planning and Organization (1-0-1)
Prerequisite: None
Class will deal with aspects of classroom organization such as integrated day and use of learning stations. Practice will be given in formulating objectives and choosing methods for evaluating outcomes. Lesson plans, game making, and unit construction will be discussed. This course is designed to be a terminal course.

EDU 192 Workshop in Phonics (1-0-1)
Prerequisite: None

Practical experience will be given in auditory discrimination and use of phonetic clues to assist reading skill development. Methods of teaching phonetic skills to young children will be explored and practiced.

EDU 201 Introduction to Education (5-0-5)
Prerequisite: None
A course designed for students beginning professional training in teacher education. It aims to acquaint the prospective teacher with four major aspects of education: the teaching profession, the school system, the teacher and the pupil

EDU 203 The Exceptional Child (3-0-3)
Prerequisite: None
The study of children with developmental variations. Consideration is given to recognition of problems, community resources, and selection of appropriate activities for the child with exceptional mental or physical development.

EDU 207 Music in the Early Childhood Program (4-2-5)
Prerequisite: None
Study of music which is appropriate for young children and ways of integrating music into the total program of activities. Students learn to utilize a wide variety of materials for rhythm, instrumental performance, and dramatic play. Laboratory sessions provide opportunities for learning songs and developing extensive files; field experience provides opportunities to participate in and evaluate music activities for various age groups.

EDU 208 Art in the Early Childhood Program (4-2-5)
Prerequisite: None
Study of art media in relation to the creative process in young children, of the educational component that each medium reinforces, and of the ways a variety of low-cost art activities can be incorporated into a program for young children. Laboratory sessions provide first-hand experience with all of the media, opportunities to explore the uses of each, and practice in the care and storage of materials. Each student will plan a meaningful sequence of art activities which could be incorporated into a program for young children.

EDU 211 Science in the Early Childhood Program (4-2-5)
Prerequisite: None
Study of those scientific facts, concepts, and phenomena that are of interest to young children. Laboratory experiences provide opportunities to carry out simple experiments in which young children could participate. Each student will plan a science program which could be used as an integral component of the overall program for young children in group care.

EDU 212 Mathematics for Young Children (4-2-5)
Prerequisite: None
This course will help prospective teachers prepare materials to develop basic mathematical concepts with conservation, seriation, and geometry. Emphasis will be placed upon the development of materials and language skills necessary for presentation of lessons.

EDU 234 Production & Utilization of Audio-Visual Materials (3-3-4)
Prerequisite: None
An introduction of the various nonprint approaches to instructing children. Emphasis will be placed upon actual making of materials plus the instructional theory underlying nonprint media.

EDU 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subject
A seminar/workshop approach involving the student in discussions and/or projects on a topic in education.

Engineering Technology

EGR 103 Engineering Mechanics (3-3-4)
Prerequisites: MAT 111, PHY 111
Forces, resultants, and equilibrium by analytical and graphical methods; moments and couples; forces in simple structures and trusses; static and kinetic friction, kinetics; force, mass, acceleration, and momentum.

EGR 201 Strength of Materials (3-3-4)
Prerequisites: EGR 103, MAT 112
Basic engineering strength of materials is studied to gain the knowledge required for the successful design of machine parts and of structural members, parts, and connections. The general presentation of the course follows this outline: stress and deformation, engineering materials and their properties, riveted and welded joints, thin-walled pressure vessels, torsion, shear and moment in beams, stresses in beams, and design of beams.

EGR 221 Computer Programming (3-3-4)
Corequisite: MAT 112 or BUS 111
The use of the computer as a problem-solving tool in the area of engineering technology is taught. Program outline, flow, and data/solution format using the elementary "basic" syntax is covered. Conditional and unconditional branches, loops, and essential mathematical operators are used.

Electrical Engineering Technology

ELC 101 Electrical Fundamentals (3-3-4)
Corequisite: MAT 111
An introductory survey of the fundamentals basic to the study of Electrical and Electronics Engineering Technology. Principles of basic direct-current circuits are stressed.

ELC 102 Direct-Current Circuits (3-3-4)
Prerequisites: ELC 101, MAT 111
An introduction to the theory of circuit analysis. Equations for direct-current circuits with resistance and methods for their solution. Special emphasis on network theorems.

ELC 103 Alternating-Current Circuits (3-3-4)
Prerequisites: ELC 102, MAT 112
Elementary A-C circuits; effective and average values of current and emf, instantaneous and average power. Complex algebra, analysis of R-L, R-C, R-L-C series and parallel circuits; complex power; A-C instruments.

ELC 122 Techniques of Fabrication (0-3-1)
Prerequisite: None
A study of techniques of soldering, printed circuit layout and drawing, study of manufacturers' and suppliers' catalogs and specification sheets, project.

ELC 221 Electrical Machines (3-3-4)
Prerequisite: ELC 103
A study of the construction, principles, regulation, characteristics, efficiency and application of direct-current motors and generators, and an introduction to the transformers, alternators, and induction motors.

ELC 222 Alternating-Current Machinery (3-3-4)
Prerequisite: ELC 221
Construction, principles, characteristics, operation, efficiency, selection and application of transformers, single-phase and poly-phase induction motors, alternators and synchronous motors.

ELC 223 Electrical Control Systems (3-3-4)
Prerequisite: ELC 222
A study of types of controls, control components, pilot devices, control circuit diagrams, development and analysis of control circuits, maintaining control equipment, troubleshooting control circuits, basic concepts of static control, Boolean algebra, logic design of control circuits with static switching components, analysis of typical control circuits used in industry, and an introduction to rotating and magnetic amplifiers in control circuits.

ELC 241 Codes & Specifications (2-3-3)
Prerequisite: ELC 103
A study of the provisions established by the National Electrical Code for the safeguarding of persons, buildings and their contents, from the hazards arising from the use of electricity for light, heat, power, radio signalling, and for other purposes. A review of standard specifications for installing electrical equipment.

ELC 242 Illumination (2-3-3)
Prerequisite: ELC 103
A study of the eye and vision, light characteristics and measurements, light sources, illumination levels, interior and exterior lighting design including roadway lighting and flood-lighting layouts.

ELC 253 Power Systems I (2-3-3)
Corequisite: ELN 201
This is an introductory course in power systems involving basic concepts, series impedance of transmission lines, capacitance of transmission lines, current and voltage relations on a transmission line and the representation of power systems.

ELC 262 Power Systems II (3-3-4)
Prerequisites: ELC 253, ELN 202, MAT 113
This is a follow-up course in power systems involving load flow, economic operation and fault, and stability studies in power systems.

ELC 282 Electric Circuits & Machines (3-3-4)
Prerequisite: PHY 201
This course is a survey of electrical circuits and machines for Mechanical and Production and Industrial Engineering Technology students. It is the study of direct-current circuits, magnetism, electromagnetic induction, direct-current generators, and direct-current motors.

Electrical Installation & Maintenance

ELC 1101 D.C. Circuits (7-6-9)
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in parallel and series parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the sources of direct current voltage potentials.

ELC 1102 A.C. Circuits (3-12-7)
A study of the fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1134 Industrial Wiring (6-9-9)
Prerequisites: ELC 1101; ELC 1102
Layout, planning and installation of wir-

ing systems in industrial complexes, with emphasis upon blueprint reading and symbols, the related National Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

ELC 1143 Electrical Controls (3-6-5)
Prerequisites: ELC 1101; ELC 1102
Basic industrial electronic systems, such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyrathron tubes, and other basic types.

ELC 1144 Commercial Wiring (3-6-5)
Prerequisites: ELC 1101; ELC 1102, & ELC 1151
Provide instructions and application in the installation of electrical service-equipment and branch circuits in commercial type buildings. Requirements for electrical service as set forth by the National Electrical Code. Load calculations. Actual wiring of commercial type installation in building mock-ups.

ELC 1151 Residential Wiring Methods (3-12-7)
A complete study of residential wiring systems and components with particular emphasis on the National Electrical Code, State and Local Codes.

ELC 1155 A.C. and D.C. Machines (4-9-7)
Prerequisites: ELC 1101; ELC 1102
Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motor. Instruction in the use of the electrical test instruments in circuit analysis. The basic concepts of A.C. and D.C. machines and simple system controls. An introduction to the type control used in small appliances, such as: thermostats, timers, or sequencing switches.

ELC 1174 Power Distribution (3-3-4)
A study of electrical distribution systems for power, light and heat, including switchboards, panels, switchgear, and wiring for standard utilization and distribution voltages up to 15 Kilowatts.

ELC 1175 Electrical Codes and Estimates (3-6-5)
Prerequisites: ELC 1151, ELC 1101
Specifications for industrial, commercial, and residential wiring installations including a consideration of the applicable code regulations and licenses, analysis of plans and specifications for the preparation of electrical estimates covering industrial, commercial, and residential wiring installations.

ELC 1184 Industrial Electronics (3-3-4)
Prerequisites: ELC 1101; ELC 1102
A survey course in electronic devices and circuits that are fundamental to the electrical trade.

Electronics Engineering Technology

ELN 103 Electronics I (2-3-3)
Prerequisites: ELC 102, MAT 112
A brief discussion of semiconductor physics, intrinsic and extrinsic semiconductors, photocells, thermistors, junction diodes, diode applications. Introduction to transistors, characteristic curves, biasing, and the common base amplifier.

ELN 201 Electrical Circuits I (3-0-3)
Prerequisites: ELC 103, MAT 113
Introduction to alternating current circuit analysis techniques, Thevenin's and Norton's theorems, loop analysis, nodal analysis, series-parallel conversion techniques, maximum power transfer, delta-wye transformations.

ELN 202 Electrical Circuits II (3-0-3)
Prerequisite: ELN 201
Series and parallel resonance, Q and bandwidth, mutual induction and transformers, three phase systems.

ELN 211 Electronics II (3-3-4)
Prerequisites: ELC 103, ELN 103
The common emitter circuit, graphical analysis, D-C and A-C load lines, stability biasing, other biasing circuits, the hybrid equivalent circuit.

ELN 212 Electronics III (3-3-4)
Prerequisite: ELN 211
Construction, characteristics, and operations of JFETs and MOSFETs; cascade amplifiers; frequency response considerations.

ELN 213 Electronics IV (3-3-4)
Prerequisite: ELN 212
Large signal amplifiers, negative feedback in amplifiers, positive feedback, sine wave oscillators, tuned circuit oscillators, power supply regulators.

ELN 241 Digital Principles (2-3-3)
Prerequisite: Departmental Approval
An overview of basic principles of digital electronics. Number systems, binary arithmetic, Boolean algebra, gate circuits, flip-flops, and counters are among the topics covered.

ELN 242 Microprocessors I (3-3-4)
Prerequisite: ELN 241
An introduction to microprocessors, the history of microprocessors, microprocessor architecture, instruction sets, assembler, assembly language programming.

ELN 243 Microprocessors II (3-3-4)
Prerequisite: ELN 242
A continuation of ELN 242, software development, memory sections, input-output considerations, interrupts.

ELN 253 Communications Circuits (3-3-4)
Prerequisite: ELN 212
Review of resonance, coupled circuits, tuned transformer coupling, radio frequency voltage and power amplifiers, linear power amplifiers, A-M transmitters and receivers, single sideband, F-M transmitters and receivers.

ELN 283 Integrated Circuits (2-3-3)
Prerequisites: ELN 212, ELN 232
A study of the electrical aspects of digital IC's, linear IC's, differential and operational amplifiers, fabrication of monolithic IC's.

Electronics Servicing/ Industrial Electronics

ELN 1102 A.C. Circuits (3-12-7)
A study of the fundamental concepts of alternating current flow, reactance, impeddance, phase angle, power, and resoance, phase angle, power, and resocircuits.

ELN 1111 Electronic Instruments and Measurements (7-6-9)
VOM measurements, VTVM characteristics and measurements, capacitance and resistance measurement, measurement of inductance and O.

ELN 1112 Trouble-Shooting Techniques I (0-3-1)
Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage analysis, oscilloscope methods of locating faulty stages and components and the alignment of AM and FM receivers.

ELN 1121 D.C. Circuits (7-6-9)
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in parallel and series parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the sources of direct current voltage potentials.

ELN 1133 Power Supplies and Amplifiers (4-3-5)
Basic amplifier biasing, tyical amplifier configurations, operational amplifiers, half-wave and full-wave rectifiers, filters, electronic regulators and protection circuits, and switching power supplies are discussed.

ELN 1143 Introduction to Semiconductors (3-12-7)
Basic semiconductor physics, the P-N junction, diode, Zener effect, special diodes, bipolar transistor, firld effect transistors, thyristors, integrated circuits, and optelectronic devices are discussed.

ELN 1144 Special Semiconductors and Microelectronics (3-12-7)
Operational amplifiers, Linear integrated circuits, TTL integrated circuits, MSI, LSI, VLSI, Microprocessor families and fabrication techniques will be discussed.

ELN 1154 Oscillators, Pulse Circuits and Modulation (6-3-7)
Basic Oscillators; Feedback, O; Transformer oscillator; LC oscillator; Hartley, Colpitts, Clapp circuits; Crystal controlled oscillators; Phase locked loop; R-C Oscillators; phase-shift oscillator; Wien-bridge oscillator; non-sinusoidal oscillators; waveshaping; diode clipping; transistor clipper;- clampers, multivibrators; IC timers; Amplitude Modulation, sidebands, bandwidth, single sideband; frequency modulation, deviation, FM detectors are discussed.

ELN 1163 Introduction to Digital Logic (3-0-3)
Binary number system; binary codes, BCD, ASCII; Data representation, parallel and serial transmission; diode and transistor gates, NAND, NOR, and inverters in discrete and integrated form are discussed.

ELN 1164 Trouble-Shooting Techniques II (0-3-1)
Maintenance and repair of color T.V., cable systems, microcomputers, terminals, modems, and satellite earth stations will be covered. A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment or horizontal and vertical sweep circuits will be taught. Techniques of trouble shooting and repair of TV receivers with the proper use of associated test equipment will be stressed.

ELN 1174 Digital Techniques (3-0-3)
Flip-flops, shift registers, combinational logic circuits, digital design, and digital applications will be discussed. RS, D, and JK flip-flop; Binary, BCD, and ring counters; Dynamic MOS Shift Registers and applications; Encoders, Decoders, Multiplexers, and Demultiplexers; Truth tables and Karnaugh Map; The 6800, 8080, 8085, 8086, and Z-80 microprocessors.

English

ENG 091 Basic English (5-0-5)
Prerequisite: None
This course is designed to assist the student to review the fundamental skills

of grammar and to develop entry level proficiency in the basic writing skills required for ENG 101. Topics include sentence structure, spelling, parts of speech, vocabulary, and writing. A diagnostic pretest identified areas of weakness which the student needs to strengthen. Traditional and individualized materials and format are utilized to assist students to meet course requirements. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

ENG 093 Effective Writing (1-4-3)
Prerequisite: None
ENG 093 is an individualized course designed as an intensive review for students who will develop grammar and writing skills needed for success in ENG 101. A diagnostic pre-test provides the basis for grammar assignments. Fundamentals of writing will be emphasized by daily instruction and practice in paragraph writing.

ENG 094 Spelling and Vocabulary (1-4-3)
Prerequisite: None
ENG 094 is an individualized course in which students will review dictionary skills, develop confidence in spelling principles, and work toward acquiring and using an expanded vocabulary.

ENG 101 Freshman Grammar & Composition (5-0-5)
Prerequisite: ENG 091 or Departmental Approval
English 101 includes a review of correct usage in grammar, mechanics, punctuation, and spelling, and the writing of numerous themes. Various types of themes are considered, and students write themes based upon the principles exemplified in the sample themes which are studied. Students are trained in the preparation of the library research paper.

ENG 102 Freshman Literature (5-0-5)
Prerequisite: Successful completion of ENG 101
English 102 includes an introduction to the types of literature, including prose, poetry, and drama. Students are given training and experience in the analysis and criticism of literature.

ENG 103 Public Speaking (5-0-5)
Prerequisite: None
English 103 is a course in speech preparation, composition, and delivery. Students are given frequent opportunities to prepare and deliver short speeches of various types.

ENG 105 Introduction to Journalism (3-0-3)
Prerequisite: None
Introduction to Journalism consists of a study of a newspaper from the time an event occurs until the paper reaches the newsstands. Special emphasis is placed on responsible reporting and editorializing with respect to accuracy, fairness, slant, and the obligation to the social levels served by the newspaper.

ENG 121 Composition I (3-0-3)
Prerequisite: None
A study of the essentials of standard usage and basic principles of English grammar with emphasis on proficiency in writing clearly, effectively, and appropriately. Special importance is given to writing appropriate to the engineering technician. Seven themes are written in class and students do general expository writing as outside assignments.

ENG 122 Composition II (3-0-3)
Prerequisite: ENG 121
A course presenting a fuller continuation of correct English usage. Comprehensive study of major principles of effective business correspondence and communication, and the application of these principles to specific types of practical writing through term paper, theme, and business writing projects. Special emphasis is given to writing assignments appropriate to the engineering technician.

ENG 123 Report Writing (3-3-4)
Prerequisite: ENG 122
A seminar type course designed to acquaint the student with all phases of technical writing. The course offers information on types, styles, and mechanics of reports in general, and practice in preparing data for both formal and informal reporting.

ENG 201 English Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 201 is a study of selected works of the major British writers, including discussion of the millieu in which they wrote. Students prepare research papers in which they analyze and criticize authors and their works. ENG 201 covers major British writers from Chaucer through Samuel Johnson.

ENG 202 English Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 202 is a continuation of English 201 starting with the Romantic period and continuing through the Twentieth Century.

ENG 203 American Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 203 is a study of important American authors, their literary works and environment from the Colonial period to the Civil War period.

ENG 204 American Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 204 begins with the Civil War writers and continues through the Twentieth Century.

ENG 208 World Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 208 will survey ancient Greek, Roman, and Oriental literature. Selections representing the major themes and genres will be presented.

ENG 209 World Literature (5-0-5)
Prerequisites: ENG 101 and 102
English 209 is a continuation of ENG 208 emphasizing European literature as it evolved from the classical, stressing trends and genres from the Renaissance to the modern.

ENG 217 Children's Literature (3-0-3)
Prerequisite: None
English 217 is a study of children's literature which includes the various types of literature appropriate for young children. Evaluation of modern writers, illustrations, and books will be emphasized.

ENG 223 Public Speaking (3-0-3)
Prerequisite: None
A practical course designed to train technicians in the mechanics of oral composition. Students participate in formal, extemporaneous, and impromptu speaking as well as in conversation and interviewing. Special emphasis is placed on preparation, poise, and presentation of material. Interplay between class members and role playing are also stressed.

ENG 1101 Reading Improvement (2-0-2)
A concentrated effort to improve the student's ability to comprehend what he reads by training him to read more rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units. Reading faults of the individual are analyzed for improvement, and principles of vocabulary building are stressed.

ENG 1102 Communication Skills (2-0-2)
Development of ability to communicate effectively through the medium of good language usage in speaking and writing. Organizing thoughts, and presenting thoughts effectively in connection with problems.

Earth Science

ESC 101 Physical Geography (5-2-6)
Prerequisite: None
A study of the earth's astronomical relations, factors of weather and climate, and physiographic features, and resources such as minerals, water, soils, and seas. Also offered as GEO 101.

ESC 102 Introduction to Geology (5-2-6)
Prerequisite: None
A study of the basic principles and processes of the earth; its composition, formation, and features. Also listed as GLY 102.

Fashion Merchandising and Marketing Technology (See DMK Courses)

Fire Science

FIP 101 Introduction to Fire Protection Hazards (3-0-3)
Prerequisite: None
History and development of fire service, safety and security movements. The role of the fire service, protection and safety personnel. Ancillary organizations. Identification of general fire hazards and their causes and the application of fire protection principles to them.

FIP 102 Municipal Fire Protection (3-0-3)
Prerequisite: FIP 101
Fire department organization, personnel management, and the department's relationship with other city departments. Evaluation of public fire protection needs, financial factors, records and reports, equipment procurement policies, apparatus, tools, training needs and programs, maintenance needs and facilities, and other equipment necessary for modern fire protection.

FIP 103 Construction Codes and Material Rating (2-2-3)
Prerequisite: FIP 101
A thorough study of building codes applicable to fire prevention, and principles and practices used in various types of building construction. Fire resistance tests and ratings of building materials.

FIP 105 Applied Electricity for Fire Protection (3-2-4)
Prerequisite: None
A thorough study of methods and means of utilizing electricity to provide power. The installation and maintenance of electric circuit and machinery.

FIP 115 Fire Prevention Programs (3-0-3)
Prerequisite: None
Principles and application of fire prevention related to the community and industrial plants. The development and maintenance of fire prevention programs, educational programs, and inspection programs. Specific applications of related disciplines to fire prevention problems.

FIP 120 Municipal Finance (5-0-5)
Prerequisite: None
Municipal finance based on sound government principles and practice. A study of budget items, preparation of budget, justifying budgets, financial statements, cost accounting and record systems, taxation and audits.

FIP 135 Training Programs & Methods of Instruction (3-0-3)
Prerequisite: FIP 115
Purposes of fire service drills and training programs. The development and operation of the departments' training programs. Facilities and equipment necessary for modern training. Selecting and training the instructional staff. Suitable methods of instruction.

FIP 201 Fire Detection and Investigation (3-0-3)
Prerequisite: None
Determination of cause of accidental and incendiary fire, fire losses and loss of records, points of origin, location and preservation of physical evidence, and scientific aid to investigation. Courtroom procedure in presenting evidence. Motives and methods for fire setting and investigative methods are covered.

FIP 205 Industrial Hazards (3-2-4)
Prerequisite: FIP 101
A study of hazardous processes in industries such as petroleum, furniture, chemical, tobacco, metal, and textile, and the protection and precautions needed for personnel and property safety. Hazards that are related to heating plants, electrical systems, and storage in all industries.

FIP 208 Municipal Public Relations (3-0-3)
Prerequisite: None
A general survey of municipal public relations and their effect on the governmental process. Principles of public relations such as planning, staffing, controlling and directing information to the general public is studied. Emphasis is placed upon personal responsibilities, means of communications, policies and organization of an effective public relations program.

FIP 211 Grading of Fire Defenses (3-0-3)
Prerequisite: Consent of Advisor
Insurance grading schedules and their principles of application. Methods of analyzing fire hazards and the effects of fire hazards on fire insurance rates. A study of the National Board Grading Schedule is made in detail with other schedules covered briefly.

FIP 216 Chemical & Radiation Hazards (3-2-4)
Prerequisite: FIP 218, FIP 101
Intensive study and analysis of the special hazards encountered in the chemical and petroleum industries. Radiation hazards, effects of radiation on humans, exposure control, radiological instruments, operational and decontamination procedures, common uses of radioactive materials, transportation, storage, application of special inspection procedures.

FIP 218 Chemistry of Hazardous Materials (3-2-4)
Prerequisite: CHM 101
Theories of combustion and extinguishment, including the analysis of flammable materials and the nature of extinguishing agents. The properties of matter affecting fire behavior. The application of the laws and principles of chemistry and physics to the use, storage, and disposal of flammable liquids, solids, gases and ducts.

FIP 220 The Fighting Strategy (3-2-4)
Prerequisite: FIP 102
The aspects of tactics and strategy in extinguishing fires. Pre-fire plans, mutual and problems, techniques of using available equipment and manpower, conflagrations, techniques of predicting fires by fuel analysis. Emphasis will be on developing thinking skill in relation to crises.

FIP 225 Fire Protection Law (3-0-3)
Prerequisite: FIP 102
A study of law in relation to fire protection. Torts. Terms and Contracts studied by case method. Liability of fire protection personnel when making inspections, recommendations, fighting fires, and other tasks. Pertinent laws, ordinances, and codes and the responsibilities and powers of the individual or organization concerning enforcement.

FIP 226 Industrial Safety (3-0-3)
Prerequisite: FIP 101
A fundamental study of industrial safety records, development of safeguards, accident costs and causes, job safety analysis, plants designed for safety, and safety maintenance. Methods of eliminating hazards including color coding, guards, and personal protective equipment. A study of the precautions and safeguards essential to protecting lives during fires in various types of occupancies. Exit code requirements, personnel protective devices, and practical safeguards will be studied. Review of case histories of fires and explosions which have resulting in los of life to determine how these types of tragedies can be prevented.

FIP 230 Hydraulics and Water Distributive Systems (3-2-4)
Prerequisites: MAT 101, PHY 101
Mechanics of the flow of fluids through fire hose, nozzles, and appliances, pumps, standpipes, watermains, and other devices. Design, testing, and use of nozzles, and appliances, pumps, and water distribution systems. Measurement of fluid flow and methods of determining quantities of water available from a distribution system. Practical applications of principles.

FIP 231 Sprinkler and Standpipe Systems (3-2-4)
Prerequisite: FIP 230
Types of sprinkler and standpipe systems, system devices and their operation, advantages of sprinkler systems, codes governing installation, water supply requirements, testing, inspection, and maintenance.

FIP 235 Inspection Principles and Practices (3-4-5)
Prerequisites: FIP 103, DFT 136
A study of the fundamentals of fire inspections including standards, techniques of evaluation of hazards as to degree of the hazard and practical recommendations. Reports including maps and sketches of each building inspected. On-the-site inspections of buildings to locate hazards and to recommend safe practices and improvements.

FIP 240 Multiple Line Insurance & Rating Schedules (4-0-4)
Prerequisite: FIP 211
A study of multiple line insurance, types of policies, selection, rate making, settlement of claims, handling of risks, and self-insurance. Types of rating schedules including the analytic and mercantile schedule. Methods of determining fire rating classification.

FIP 245 Automatic Alarm & Extinguishing Systems (3-2-4)
Prerequisite: FIP 105
A study of the types of fixed extinguishing systems, standard and special fire alarm and fire detection systems; their operation, installation requirements, testing, inspection, and maintenance.

French

FRE 100 Conservational French (5-0-5)
Prerequisite: None
This is a one-quarter course for students desiring a basic vocabulary and the ability to engage in simple conversation. This course is designed as a study of the French people, their language, and their culture with emphasis on fundamental sounds and structures of the language. This course is planned for beginning students or for those desiring to up-grade previously acquired skills in French.

FRE 101 Elementary French (5-0-5)
Prerequisite: None
This is a beginning course which stresses the basic language skills—listening, speaking, reading, and writing—along with cultural aspects.

FRE 102 Elementary French (5-0-5)
Prerequisite: FRE 101 or Equivalent
This is a course which stresses the continuing development of the basic language skills and cultural studies.

FRE 106 French Civilization (3-0-3)
Prerequisite: None
This is a course designed to foster a greater understanding and appreciation of French culture and civilization with emphasis on history, geography, culture, society, economics, politics, and government. The course consists of lecture, outside readings, class reports, a research project and is taught in English. It is also offered as HIS 106.

FRE 201 Intermediate French (5-0-5)
Prerequisite: FRE 101 and 102 or 2 years high school French
This is a course which reinforces the basic language skills. It includes extensive readings, a grammar review, and cultural studies. Stress is given to spoken and written expression.

FRE 202 Intermediate French (5-0-5)
Prerequisite: FRE 201 or Equivalent
This is a course which stresses spoken and written expression. It includes a grammar review, extensive readings, and cultural studies.

FRE 250 Independent Study (5-0-5)
Prerequisite: Departmental Approval
A student who has completed the first two years of French may elect this course. The nature of the course and the amount may be determined by consultation with the instructor.

Geography

GEO 101 Physical Geography (5-2-6)
Prerequisite: None
A study of the earth's astronomical relations, factors of weather and climate, and physiographic features, and resources such as minerals, water, soils, and seas. Also offered as ESC 101.

GEO 105 Ecology of Man (5-2-6)
Prerequisites: BIO 101, BIO 121, or GEO 101
A course which examines the past and present relationships of man with his biophysical environment. Consideration will

be given to ecological concepts, population growth, pollution, human variation, and conservation of natural resources. This course is also offered as BIO 105 Ecology of Man.

GEO 111 World Regional Geography I (3-0-3)
Prerequisite: None
An attempt is made to describe and explain many of the similarities and differences that exist from place to place on the earth. Emphasis is on the cultural characteristics and related problems of selected regions. Europe, USSR, and Anglo-America are covered in GEO 111.

GEO 112 World Regional Geography II (3-0-3)
Prerequisite: GEO 111 recommended.
An attempt is made to describe and explain many of the similarities and differences that exist from place to place on the earth. Emphasis is on the cultural characteristics and related problems of selected regions. Mid-east, the Orient, Pacific World, Africa, and Latin America are covered in GEO 112.

GEO 202 Geography of Anglo-America (3-0-3)
Prerequisite: None
A consideration of the geographical regions of the continent—its climates, industries, natural resources, and human response to environment. Geomorphology, provinces, urban pattern, and political geography of the United States are treated. The student prepares numerous maps and tables.

GEO 204 Economic Geography (3-0-3)
Prerequisite: None
A study of the economic, social, political aspects of the distribution of natural resources and their utilization. The influence of industry, agriculture, and natural resources on the population density is developed.

GEO 205 Conservation of Natural Resources (3-0-3)
Prerequisite: None
Problems and techniques of conserving water, soil, minerals, plants, animals, and human resources. This course is also offered as BIO 205.

Geology

GLY 102 Introduction to Geology (5-2-6)
Prerequisite: None
A study of the basic principles and processes of the earth; its composition, formation, and features. Also listed as ESC 102.

History

HIS 101 World Civilization—Ancient (3-0-3)
Prerequisite: None
A history of civilizations in the Ancient period. A survey of political, social, and artistic developments in Mesopotamia, Egypt, Greece, and Rome.

HIS 102 World Civilization—Medieval (3-0-3)
Prerequisite: None
A survey of European social, political, and cultural history from the fall of Rome to 1715, including the Middle Ages, the Renaissance and Reformation, and Early Modern France, England, Germany, and Italy. This course examines the influences of the Byzantine and Islamic cultures of European society.

HIS 103 World Civilization—Modern (3-0-3)
Prerequisite: None
The history of Europe from 1715 to 1945. A survey of life in Europe from the French Revolution and Enlightenment through the early Twentieth Century, including the effects on the United States and Soviet Union.

HIS 104 World Civilization—Contemporary (3-0-3)
Prerequisite: None
The history of the world since 1945 to the present. A survey of the political, social, and economic developments of Europe, Asia, Africa, and Latin America, and how they have affected world affairs.

HIS 106 French Civilization (3-0-3)
Prerequisite: None
This is a course designed to foster a greater understanding and appreciation of French culture and civilization with emphasis on history, geography, culture, society, economics, politics, and government. The course consists of lecture, outside readings, class reports, a research project, and is taught in English.

HIS 201 United States History to 1877 (5-0-5)
Prerequisite: None
American history from the period of discovery and colonization through Reconstruction. Emphasis is upon promoting an understanding of and an appreciation for the fundamental themes and patterns in the social, economic, and cultural development of the nation. Special attention is focused upon the origin and development of constitutional government, geographic expansion, and the controversy growing out of sectional issues.

HIS 202 United States History from 1877 (5-0-5)
Prerequisite: None
American history from 1865 to the present, with emphasis upon the emergence of the U.S. as a modern industrial nation and world power, the "big change" in social, political, and economic development of the Twentieth Century, and the diplomatic complexities confronting the U.S. in the contemporary world.

HIS 203 North Carolina History (5-0-5)
Prerequisite: None
The history of North Carolina from its discovery by the French and Spanish to the present. Political, agricultural, industrial, religious, educational, literary, and social developments receive proper attention.

HIS 204 Afro-American Studies (5-0-5)
Prerequisite: None
A general study of the contributions of the black race to American Society. A study of slavery, Black Intellectuals, the attempt of the Black man to understand himself and his place in modern U.S. society, and the Black-White confrontation.

HIS 210 The Christians: An Historical Perspective (3-0-3)
Prerequisite: None
A series of thirteen films presenting the history of Western man through the eyes of the Christian church, with special emphasis placed upon the growth of Christianity and its impact on mankind. The films trace the growth of the new religion from its earliest days to the challenges faced by Western Civilization and the Christian religion by the 20th century.

HIS 220 Women In Society (5-0-5)
Prerequisite: None
This course is a survey of women's place in society beginning with ancient times, although the primary emphasis is on women in American society. The subject will be treated historically, with emphasis on the 20th century, but it will also include elements of sociology, psychology, biology, and literature.

HIS 280 Study Tour (2-12-6)
Prerequisite: None
A five week, condensed course involving three weeks of intensive study on the campus of Gaston College, followed by two weeks of off-campus study and travel. This course may involve travel within the United States or abroad as an open laboratory experience for students. This course involves an interdisciplinary study including history, culture, art, architecture, music, politics, etc., with special emphasis given to one or more of these topics. Also offered as an ANT 280, SOC 280, and POL 280. (Course prefix designated at the time the area of study is determined.)

HIS 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subjects.
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning a topic in History.

HIS 291 Educational Travel (1-6-3)
A social sciences course designed to allow students to obtain limited college credit for valid educational travel, both domestic and foreign. Permission for such Educational Travel must be obtained from the Director of Study Tours before such travel is conducted, and all classwork, written exams, and projects must be submitted to the appropriate department chairman before academic credit is granted. Students are required to register for the course before travel is undertaken. (Course prefix designated at the time the area of study is determined.)

Industrial Engineering Technology
Industrial Management Technology

ISC 102 Principles of Industrial Management (5-0-5)
Prerequisite: None
The basic managerial decisions; organizational structure including plant location, building requirements, and internal factory organization; problems of factory operation and control, planning, scheduling, routing factory production, stores control, lab control, purchasing, cost control.

ISC 103 Plant Layout and Materials Handling (0-6-2)
Prerequisite: DFT 101
Principles of plant layout to obtain the most effective utilization of materials and machines, as related to space and cost. Selection and use of modern equipment and methods for handling materials in industrial processes.

ISC 113 Industrial Safety (3-0-3)
Prerequisite: None
A comprehensive review of industrial hazards, prevention of accidents, and a study of the laws covering occupational health and safety.

ISC 201 Production Planning (3-0-3)
Prerequisite: None
Production planning and control of inter-

mittent manufacturing, continuous manufacturing, sales forecasting, and basic wage incentive plans.

ISC 202 Industrial Systems (3-3-4)
Prerequisite: ISC 201
An introduction to the principles, evaluation, requirements, design, analysis improvement, and installation of industrial systems.

ISC 203 Essentials of Work Measurement (2-3-3)
Prerequisite: ISC 222
A study of the principles of job requirements, improvement of manufacturing efficiency, and the application of these principles to the current industrial economy.

ISC 211 Industrial Safety (0-3-1)
Prerequisite: None
A comprehensive study of human factors that are the basis for safety precautions and practices, including a review of occupational health and safety laws.

ISC 212 Profit Improvement (3-3-4)
Prerequisite: MAT 111 or BUS 111
Brief introduction to the advanced tools of scientific management for controlling profit, with emphasis on their application to industry.

ISC 213 Statistics and Quality Control (3-3-4)
Prerequisite: MAT 112
Statistical techniques useful to technicians; includes elementary probability, frequency distribution, estimating of means, standard deviations, sampling variations, and control charts.

ISC 222 Methods Analysis (2-3-3)
Prerequisite: None
Introduction to the principles of motion economy through the various process charts. Also the techniques of micromotion study, job analysis, and job evaluation.

ISC 223 Work Measurement (2-6-4)
Prerequisite: ISC 222
Basic time study concepts and familiarization with the tools of time study. The application of performance ratings and allowances to basic times so as to formulate a standard time for a given task. Also, the use of standard data and synthetic basic motions and times.

ISC 233 Industrial Organization & Management (3-0-3)
Prerequisite: None
The interrelations of all systems of modern management. Organizational structure, plant location, safety, industrial and labor relations, and product and material standardization.

ISC 243 Quality Control (3-3-4)
Prerequisite: BUS 111
Principles and techniques of quality control and cost saving. Functions, responsibilities, structure, costs, reports, records, personnel and vendor-customer relationships in quality control. Sampling inspections, process control, and tests for significance.

ISC 253 Management Problems (5-0-5)
Prerequisite: ISC 102
A study of the methods used to solve the problems that modern management faces on a day-to-day basis.

ISC 280 Quality Control Seminar (2-0-2)
Prerequisite: None
This course is designed to acquaint the student with basic probability theory as it is used in control charts. Interpretation of raw data, establishing production capabilities and evaluation of control chart data will be covered.

Law

LAW 108 Nature & Function of Law in Society (3-0-3)
Prerequisite: None
The presentation of a philosophical and historical appreciation of what law is within the framework of social order. In addition to an analysis of how present laws came to be, particular emphasis will be placed on the way in which our present day society utilizes the law as a social control device. Also offered as POL 108.

LAW 120 Family Law (5-0-5)
Prerequisite: None
A study of the laws governing domestic relations under common law and as changed by statute. The laws dealing with sex relations, marriage, divorce, and children. Child custody, juvenile delinquency, and the juvenile court system.

LAW 215 Consumer Law (5-0-5)
Prerequisite: None
A survey of the methods by which individuals and communities can protect themselves against misleading advertising and labeling, unsafe products, and pollution. Land use planning. Environmental protection.

LAW 216 Property Law (3-0-3)
Prerequisite: None
The law of real property and personal property; estates in land and future interests. Leasing, transferring, mortgages, recording, covenants, easements, licenses, landiord and tenant, wills, and successions, probate.

Math

MAT 080 Basic Arithmetic (5-0-5)
Prerequisite: None
An introductory math skills course. Top-

ics include arithmetic operations, whole numbers, fractions ratios, decimals, proportions and percents. A diagnostic pretest identifies areas of weakness. Both small group and self-paced methods are used. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

MAT 083 Introduction to Algebra (5-0-5)
Prerequisite: MAT 080 or placement test proficiency
This course contains the essentials of the first year of high school algebra. Topics include signed numbers, linear equations, graphing, factoring, exponents, and radicals, quadratic equations, and others. Both traditional and individualized methods are used. A diagnostic pre-test identifies areas of weakness for each student. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements. This course replaces the previous MAT 081 and MAT 082 which were named Elementary Algebra.

MAT 091 Basic Algebra (5-0-5)
Prerequisite: None
Review of high school algebra for students having deficiency in algebra or in need of a refresher course before entering MAT 111. Included in this course will be fundamental concepts and operations in algebra, functions and graphs, factoring and fractions, quadratic equations, exponents and radicals, This course is intended for technical or pre-engineering students because of its application to the engineering curriculum. A diagnostic pretest identifies areas of weakness for each student. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

MAT 093 Basic Calculations for Drug Administration (5-0-5)
Prerequisite: None
This course is designed for students who plan to enter a nursing or allied health curriculum. Topics include a review of arithmetic operations, basic math skills, systems of measurements and computations of drug doses within these systems. A diagnostic pre-test identifies areas of weakness which the student needs to strengthen in order to complete course requirements. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

MAT 100 Principles of Mathematics (5-0-5)
Prerequisite: Departmental Approval
This course is primarily intended for non-science or liberal arts majors. Some background in algebra is required. Applications of principles are made in a wide variety of areas. This course is designed to precede MAT 102. A student will not receive credit for both 100 and 101.

MAT 101 College Algebra (5-0-5)
Prerequisite: Departmental Approval
A study of the real numbers from a postulational point of view and some of their derived properties. Included are such topics as: sets, relations, functions, theory of equations, systems of equations, matrices and determinants, complex numbers, inequalities, mathematical induction, partial fractions, the binomial theorem, and elementary analytic geometry.

MAT 102 Topics in Mathematics (5-0-5)
Prerequisite: MAT 100, or MAT 101
A continuation of the study began in MAT 100 or MAT 101 including an introduction to trigonometry, permutations, and combinations, probability, statistics, progressions, and geometry. The course also includes a discussion of the fundamental concepts of both differential and integral calculus with applications.

MAT 104 Trigonometry (5-0-5)
Prerequisite: MAT 100 or MAT 101
A study of the trigonometric functions, complex numbers, and logarithms.

MAT 105 Advanced Algebra & Trigonometry (5-0-5)
Prerequisite: Departmental Approval
Selected topics in advanced algebra and an intensive study of analytic trigonometry. This course is designed as a precalculus course.

MAT 106 Analytic Geometry & Calculus (5-0-5)
Prerequisite: MAT 105, or MAT 104
The first quarter of four quarter sequence. Most of plane analytic geometry is covered as well as the basic elements of differential and integral calculus.

MAT 107 Analytic Geometry & Calculus (5-0-5)
Prerequisite: MAT 106
A continuation of MAT 106. MAT 107 continues with the differentiation and integration of trigonometric, logarithmic, and exponential functions and techniques of integration.

MAT 111 Algebra & Trigonometry I (5-0-5)
Prerequisite: None
Review of fundamental algebraic operations; analysis of linear and quadratic functions including the conic sections; basic trigonometric functions, systems of linear equations; quadratic equations; graphs of trigonometric functions; exponents and radicals. Electronic calculator instruction is integrated to coincide with the appropriate lecture materials and applications appropriate to engineering technology.

MAT 112 Algebra and Trigonometry II (5-0-5)
Prerequisite: MAT 111
Exponential and logarithmic functions; systems of equations; determinants and matrices; inequalities; introduciton to linear programming; arithmetic and geometric progressions, inverse trigonometric function, trigonometric identities and equations. Introduction to statistics and impirical curve fitting. Applications and further electronic calculator use in problems appropriate to engineering technology.

MAT 113 Analytic Geometry and Calculus I (5-0-5)
Prerequisite: MAT 112
Introduction to analytic geometry, a study of the linear equation and the conic sections in rectangular and polar coordinates. Differentiation of algebraic, logarithmic and exponential functions. Applications of derivatives to physical problems such as velocity, acceleration, maxima and minima. Integration techniques and use of the table of integrals. Evaluation of the definite integral, plane areas and volumes of revolution, applications to centroids, moments of inertia, work and probability. Expansion of functions in series and an introduction to differential equations. Emphasis is placed on problem solving appropriate to engineering technology.

MAT 114 Analytic Geometry and Calculus II (5-0-5)
Prerequisite: MAT 113
Introduction to solid analytic geometry; functions of two variables, curves and surfaces in three dimensions. Partial derivatives and double integrals; centroids and moments of inertia by double integration. Differentiation and integration in polar coordinates with applications. Empirical curve fitting for linear and non-linear data. Functions in series. Differential equations of the first and second order with applications appropriate to engineering technology. Numerical solutions to differential equations with an introduction to Laplace transform.

MAT 206 Analytic Geometry and Calculus (5-0-5)
Prerequisite: MAT 107
A continuation of MAT 107. Included are indeterminate forms, improper integrals, polar coordinates, infinite series, and vectors in both two and three dimensions.

MAT 207 Analytic Geometry and Calculus (5-0-5)
Prerequisite: MAT 206
A continuation of MAT 206. Included are physical applications including moments and centroids, multiple integrals, and an introduction to differential equations.

MAT 210 Elementary Statistics (5-0-5)
Prerequisite: MAT 101 or its equivalent
A non-calculus treatment of techniques and procedures for handling data. Topics include: analysis of data, probability, binomial and normal distributions, hypothesis testing, T-Distribution, Chi-square distribution, F-distribution, non-parametric statistics, regression and correlation, and analysis of variance. This course is also offered as PSY 210.

MAT 1101 Trade Math I (4-0-4)
Practical number theory. Analysis of basic operations: Addition, subtraction, multiplication, and division. Fractions, decimals, powers and roots, percentages, ratio and percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and columns. Introduction to algebra used in trades. Practice in depth.

MAT 1103 Algebra and Trigonometry (4-0-4)
Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fractions, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: adding and subtraction, substitution, graphing, exponents, logarithms, tables and interpolation.

Trigonometric ratios; solving problems with right triangles; using tables, and interpolating; solutions of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics are applied to practical problems.

MAT 1112 Electrical Math (4-0-4)
Prerequisite: ELN 1111
Algebra for complex electric/electronic circuits, Kirchhoff's Laws, efficiency, trigonometry for A.C. circuits, calculation of inductive, capacitive and resistive A.C. components.

MAT 1153 Machinist Mathematics (4-0-4)
Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems.

Mechanical & Production Engineering Technology

MEC 101 Production Technology I (3-3-4)
Prerequisite: None
A survey of manufacturing processes, machine tools, and inspection devices with regard to their capabilities, capacities, tolerances, finishes, etc. Laboratory involves operation and use of machine tool and measuring devices.

MEC 102 Production Technology II (3-3-4)
Prerequisite: MEC 101
Process planning of operation sequence for efficient production, tool planning, estimating; laboratory operation of machine tools in production projects.

MEC 103 Physical Metallurgy (3-3-4)
Prerequisite: PHY 111
A study of the physical properties of metal and other materials. The laboratory includes a study of the grain structure and microconstituents of metals, phase diagrams, and heat-treating processes.

MEC 201 Jig & Fixture Design (2-3-3)
Prerequisites: DFT 102, MAT 112, MEC 102
A study of basic locating and clamping principles and devices. Laboratory: Design of jigs and fixtures.

MET 203 Tool & Die Design (2-3-3)
Prerequisite: MEC 201
A practical course in which parts, tools, and dies are designed in actual layout on the drawing board. Emphasis is placed on the fundamental purpose of tool and die design to reduce the cost of the finished commodity, to simplify design, to save materials, and to eliminate unnecessary manufacturing steps.

MEC 222 Machine Design I (3-3-4)
Prerequisites: DFT 102, EGR 103, MAT 112
A study of the basic theories and techniques in the analysis of relative motion, acceleration, and velocities of machine parts such as linkages, cams, gears, and other mechanisms.

MEC 223 Machine Design II (3-3-4)
Prerequisite: MEC 222
A study of the design of basic machine elements such as shafts, keys, belts, gears, bearings, couplings, and clutches.

MEC 232 Thermodynamics (3-0-3)
Prerequisites: MAT 112, PHY 112
A study of the fundamental laws of thermodynamics and the properties of materials and systems. Principles and techniques are developed for thermodynamic processes involving work, energy, and heat.

MEC 233 Industrial Instrumentation (3-3-4)
Prerequisite: ELC 282
A study of basic principles and instruments for the measurement and control of industrial processes. Laboratory in use and application of electronic, pneumatic, and hydraulic measurement devices to measure temperature, pressure, flow, humidity, etc.

MEC 252 Fundamentals of Mechanical Design (3-0-3)
Prerequisite: PHY 111
To acquaint the student with the principles of the applied sciences in order that proper components of mechanical design, such as power trains, gearing, bearings, shafts, etc., may be used.

Machinist

MEC 1101 Machine Tool Fundamentals (3-12-7)
An introduction to the machinist trade and the potential it holds for the craftsman. Deals primarily with the identification, care and use of basic hand tools and precision measuring tools. Elementary layout procedure and processes of the power cut-off saw, band saw, drill press, milling machine, lathe, and off hand grinding will be introduced both in theory and practice.

MEC 1102 Machine Operations And Setups (3-12-7)
Advanced operations in layout tools and procedures, surface grinding, milling machine, lathe, and planer. The students will be introduced to operations involved in cylindrical, cutter and internal cylindrical grinding. Projects will be selected encompassing proper setups and machine operations.

MEC 1103 Machine Tool Operations (3-12-7)
Advanced work on the engine lathe, turning, boring and threading machines, grinders, milling machine and shaper. Introduction to basic indexing and terminology with additional processes on cal-

culating, cutting and measuring of spur, helical, and worm gears and wheels. The trainee will use precision tools and measuring instruments such as vernier height gages, protractors, comparators, etc. Basic exercises will be given on the turret lathe and on the tool and cutter grinder.

MEC 1104 Advanced Machine Shop (3-12-7)
Development of class projects using previously learned procedures in planning blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylinder and surface grinder, advanced milling machine operations, etc. Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry.

MEC 1111 Machine Processes I (0-3-1)
An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

MEC 1112 Machine Processes II(0-3-1)
Advanced operations in layout tools and procedures, operational capabilities of all basic machines, finishes and finish symbols. Included will be a study of castings and casting specifications.

MEC 1114 Metals (2-4-4)
Elementary and practical approach to metals, their structure, markings, classifications and uses will be studied. Interpretation of properties and specification of steels by use of manuals, catalogs, charts, etc. Heat treating and color coding will be discussed. The effect on hardening, tempering, and annealing upon the structure and physical properties of metal.

MEC 1121 Machinist Drafting (4-5-6)
A study of drawing principles and practices for print reading and describing objects in graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, free hand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practice of dimensioning.

MEC 1123 Structure of Metals (4-0-4)
Elementary and practical approach to metals, their structure, markings, classification and uses. Interpretation of properties and specification of steels by use of manuals, catalogs, charts, etc.

MEC 1133 Specialized Machine Operations (3-2-4)
Specialized work on the engine lathe, turret lathe, grinders, milling machines, and shapers. Additional use of the index head, rotary table, holding fixtures, boring heads, facing heads, tracers, etc.

MEC 1154 Blueprint Reading For Machinist (1-3-2)
Advanced blueprint reading as related to actual complete detail drawings found in Machine Shop. (Formerly MEC 1152).

Medical Office Assistant

MOA 100 Medical Terminology and Vocabulary I (3-0-3)
Prerequisite: None
Medical Terminology and Vocabulary I is a beginning course in medical terminology. This course provides a study of the structure of medical words and terms. Emphasis is placed on spelling and defining commonly used prefixes, suffixes, word roots and their combining forms.

MOA 101 Medical Terminology and Vocabulary II (3-0-3)
Prerequisite: MOA 100
Medical Terminology and Vocabulary II is a continuation of MOA 100 with greater emphasis on an understanding of terminology and its use in the medical office. Anatomical body parts, diseases, operations, tumors and descriptive terms are emphasized by analysis of the terms and structure of the words.

MOA 102 Medical Terminology and Vocabulary III (3-0-3)
Prerequisite: MOA 101
Medical Terminology and Vocabulary III is a continuation of MOA 101 with further study of the medical terms as they relate to anatomical body parts, diseases, operations, cancer, x-rays, nuclear medicine, and drugs.

MOA 103 Orientation to Medical Office Assisting (3-0-3)
Prerequisite: None
Orientation to Medical Office Assisting is designed to help the student in understanding the role of the medical office assistant. Emphasis is placed on the development of appreciations and attitudes in the establishment of realistic goals in personal and occupational development. The student is also guided in the study of professional grooming, public relations, and community resources to complete the overview of the role of the medical office assistant.

MOA 105 Interpersonal Relationships (3-0-3)
Prerequisite: None
Interpersonal Relationships is designed to be an action-oriented course in which the student will be guided toward a better

understanding of human relationships. Emphasis is placed on self-awareness, interpersonal relationships, public image, office interactions with co-workers and patients, professional relationships and group cohesiveness.

MOA 110 Medical Law, Ethics, and Economics (3-0-3)
Medical Law, Ethics, and Economics is designed to acquaint the student with the legal aspects of medical practice acts, the relationship of physician, patient, professional liabilities, and types of medical practice. Basic principles of medical economics are also included.

MOA 200 Medical Office Assisting I (2-6-4)
Prerequisite: None
Medical Office Assisting I is designed to teach the basic techniques and skills needed by the medical office assistant in assisting the physician in the clinical area of his practice. This course emphasized housekeeping functions in the medical office, diet and nutrition, care of instruments and supplies, sterile techniques, body mechanics, recording of vital signs, and handling emergency situations.

MOA 201 Medical Office Assisting II (3-6-5)
Prerequisite: MOA 200
Medical Office Assisting II is a continuation of MOA 200 with greater emphasis on office skills and more complicated procedures. Special emphasis is placed on assisting the physician with examinations, medical-surgical procedures, pharmacology, and electrocardiograms (EKG's).

MOA 202 Medical Office Assisting III (3-6-5)
Prerequisite: MOA 201
Medical Office Assisting III is a continuation of MOA 201 with further study of the clinical aspects of medical office assisting. Special emphasis is placed on first-aid, cardio-pulmonary resuscitation (CPR), physiotherapy, and orientation to x-ray procedures. During this course the student will rotate through various physicians' offices to observe the clinical aspects of medical practice.

MOA 206 Laboratory Orientation I (2-6-4)
Prerequisite: None
Laboratory Orientation I is designed to introduce the medical office assistant student to the various laboratory procedures necessary to aid the physician in diagnosing the patient's illness. Emphasis is on the preparation of the patient for various procedures which may be ordered, their purposes and the expected norms or results. Special attention is on urinalysis, hematology, bacteriology, and immunology.

MOA 207 Laboratory Orientation II (3-6-5)
Prerequisite: MOA 206
Laboratory Orientation II is a continuation of MOA 206 with greater emphasis on skill and the more complicated procedures performed in the physician's office.

MOA 208 Medical Office Practicum (0-20-2)
Prerequisite: Successful completion of the first five quarters of the Medical Office Assistant Curriculum
Medical Office Practicum is the practical application of the skills previously learned in Medical Office Assisting. The student will be assigned to a physician's office and will work there (as a student, not an employee) for 20 hours a week under the supervision of the medical office staff. Assignments will be related to encompass all phases of experiences in management, examination room procedures, and laboratory procedures.

MOA 210 Medical Office Assisting Seminar (6-0-6)
Prerequisite: Successful completion of the first five quarters of the Medical Office Assistant Curriculum
Medical Office Assisting Seminar is a study of the personal and occupational responsibilities of a practitioner in the field of Medical Office Assisting. The primary focus will be on discussion of problems encountered during the experience in the medical office practicum. The student will also be guided in further study of professional grooming.

MOA 211 Medical Transcription (3-2-4)
Prerequisite: BUS 102 and MOA 102
Medical Transcription is an introduction to typewriting of medical forms and machine transcription. This course is designed to help the medical office assistant student develop accuracy and skill in spelling, punctuation, and typewriting of medical histories, reports, and forms.

MOA 212 Medical Transcription II (3-2-4)
Prerequisite: MOA 211
Medical Transcription II is a continuation of MOA 211. This is an optional course offered to Medical Office Assistant Students (one that can be taken in addition to the established curriculum for personal enrichment). Successful completion of this course will entitle the student to the American Medical Records Association Medical Transcription certificate.

MOA 220 Medical Office Assisting Administrative I (2-4-4)
Prerequisite: BUS 102 and MOA 102
Medical Office Assisting Administrative I is a study of the administrative duties of the medical office assistant. The course includes the scheduling of appointments,

telephone techniques, handling of mail, filing systems, and office management.

MOA 221 Medical Office Assisting Administrative II (2-4-4)
Prerequisite: MOA 211 and MOA 220
Medical Office Assisting Administrative II is a continuation of MOA 220 with greater emphasis on skill and more complicated administrative procedures including such areas as travel arrangements, insurance forms and their preparation, financial records, and bookkeeping procedures.

Museum Technology

MUE 101 Introduction to Museum Science (3-0-3)
Prerequisite: None
A course designed to acquaint students with the history, types, functions, and philosophies of museums in the United States. Consideration will be given to use and care of collections, types of exhibits, education and activities, registration and cataloging, and the relationships of museums to society.

MUE 181 Museum Science (1-10-2)
Prerequisite: Admission to the Museum Technology Program
A course designed to provide a student with classroom instruction and work experience in museum science to include display construction, research, library work, museum education, museum business, and other phases of museum operations, under the guidance of the director and staff of a museum.

MUE 182 Museum Science (1-10-2)
Prerequisite: Admission to the Museum Technology Program
A second course designed to provide a student with classroom instruction and work experience in museum science to include display construction, research, library work, museum education, museum business, and other phases of museum operations under the guidance of the director and staff of a museum.

MUE 183 Museum Science (1-10-2)
Prerequisite: Admission to the Museum Technology Program
A third course designed to provide a student with classroom instruction and work experience in museum science to include display construction, research, library work, museum education, museum business, and other phases of museum operations, under the guidance of the director and staff of a museum.

MUE 270 Museum Assistant I (1-20-3)
Prerequisite: Permission of Director of Museum Science Program
A course designed for students with extensive education background or experience who want to gain work experience in a museum setting. The course will involve classwork on campus and projects and assignments at a museum with and under the direction of the museum director and his staff.

MUE 271 Museum Assistant II (1-20-3)
Prerequisite: Permission of Director of Museum Science Program
A continuation of MUE 270 with greater emphasis on individual projects. Initiative and self-reliance on the part of the student will be stressed.

Music

MUS 90 Basics of Music (1-0-1)
Prerequisite: None
The course is designed for those with little or no musical background who wish to enroll in the music theory or in the applied music courses. A systematic study is made of musical notation, music symbols, musical forms, elementary sight reading.

MUS 101 Music Appreciation (3-0-3)
Prerequisite: None
A course designed primarily for students with a limited background in music. An investigation into the component parts of music—rhythm, melody, harmony, texture, and design—and how these elements interact. A comprehensive survey of the history of music from its earliest beginnings to the present, with particular emphasis on the music literature, both vocal and instrumental, of well-defined periods: Middle Ages, Renaissance, Baroque, Classical, Romantic, Impressionistic, and Modern. This course meets the requirements for North Carolina certification in elementary education. For non-music majors.

MUS 102 Musical Literature (3-0-3)
Prerequisite: None
Same course description as MUS 101 with additional work required for music majors.

MUS 103 Music Literature (3-0-3)
Prerequisites: MUS 101, 102 or Departmental Approval
A study of opera and oratorio from the earliest beginnings to the present. A survey is made of the masterpieces in each category, with one opera and one oratorio studied in depth.

MUS 104 Introduction to Symphonic Literature (3-0-3)
Prerequisites: MUS 101, 102 or Departmental Approval
The course is designed for those with an elementary knowledge of music appreciation who wish to increase their enjoyment of music for the symphony orches-

tra. A systematic study is made of the development of the symphony as an art form, with illustrations for listening selected from the works of the classical period to the present.
Century composers.

MUS 111 Theory I (3-0-3)
Prerequisite: Departmental Approval
Sight-singing, scales, major and minor keys, elementary harmony, melodic and harmonic dictation, key signature, rhythm, simple and compound meter. Designed for music majors.

MUS 112 Theory I (3-0-3)
Prerequisite: Departmental Approval
A continuation of MUS 111.

MUS 113 Theory I (3-0-3)
Prerequisite: MUS 112, or Departmental Approval
A continuation of MUS 112.

MUS 125 Class Voice (2-0-2)
Prerequisite: None
Group instruction in the fundamentals of singing, for both solo and choral performance: correct posture and breathing, tone production, resonance, musical phrasing, diction, and artistic interpretation. Songs for study are chosen from the basic repertory, including folksongs, classics, artsongs, musical comedy and religious songs.

MUS 126 Class Voice (2-0-2)
Prerequisite: MUS 125 or Departmental Approval
A continuation of basic vocal tone production plus techniques of good diction. Will include study of various songs and arias. May be repeated for six hours credit.

MUS 127 Class Voice (2-0-2)
Prerequisite: MUS 126 or Departmental Approval
A continuation of MUS 126. Repertoire of all styles and periods will be selected by the instructor as determined by the ability of the students.

MUS 131 Mixed Chorus (0-2-1)
Prerequisite: Departmental Approval
A laboratory type performing group for students who like to sing. A study is made of choral literature from the Renaissance to the present, including current popular tunes and excerpts from musical comedies. May be repeated for six hours credit.

MUS 134 Class Piano (0-2-1)
Prerequisite: None
Group instruction in the basic principles of piano playing. Limited enrollment. Required for all music majors and minors unless exempt by virtue of an examination in piano proficiency.

MUS 135 Class Piano (0-2-1)
Prerequisite: MUS 134, or Departmental Approval
A continuation of MUS 134.

MUS 136 Class Piano (0-2-1)
Prerequisite: MUS 135, or Departmental Approval
A continuation of MUS 134, 135. May be repeated for six hours credit.

MUS 141 Instrumental Ensemble—Stage Band (0-2-1)
Prerequisite: Departmental Approval
A laboratory type performing group. Emphasis on intonation, blend, phrasing, sightreading, interpretation. Music selected to meet the needs of the instrumentation available. May be repeated for six hours credit.

MUS 142 Instrumental Ensemble—Strings (0-2-1)
Prerequisite: Departmental Approval
A laboratory type performing group to gain experience in ensemble playing. Music selected to meet the needs of the instrumentation available.

MUS 143 Instrumental Ensemble—Brass (0-2-1)
Prerequisite: Departmental Approval
A laboratory type performing group to develop ability and experience to perform in small groups. Emphasis on quality of tone, intonation, style, breathing.

MUS 144 Instrumental Ensemble—Woodwinds (0-2-1)
Prerequisite: Departmental Approval
A laboratory course to gain experience and background in small group playing. Emphasis on quality of tone, intonation, style, and breathing.

MUS 154 Beginning Class Strings (2-0-2)
Prerequisite: None
Fundamentals of violin playing; how to select an instrument and take proper care of it; how to hold the instrument; how to use the bow.

MUS 155 Intermediate Class Strings (2-0-2)
Prerequisite: MUS 154 or Departmental Approval
Continuation of MUS 154, including the teaching of position work.

MUS 156 Advanced Class Strings (2-0-2)
Prerequisite: MUS 155 or Permission of Departmental Approval
Continuation of MUS 155, with additional emphasis on advanced position work; major and minor scales and arpeggios; introduction to simple orchestral works. May be repeated for six hours credit.

MUS 161 Orchestra (0-2-1)
Prerequisite: Departmental Approval
A laboratory-type performing group. Correct balance of different choirs, good intonation, blend, phasing, sight-reading, interpretation stressed. Music selected according to the needs and abilities of the orchestra. May be repeated for six hours credit.

MUS 211 Theory II (3-0-3)
Prerequisite: MUS 113, or Departmental Approval
Intermediate level dictation, both melodic and harmonic, in major and minor keys. Sight-seeing in treble, bass, and movable "C" clefs, in all major and minor keys.

MUS 212 Theory II (3-0-3)
Prerequisite: MUS 211, or Departmental Approval.
Continuation of MUS 211. Analysis of Harmonic structure in Bach chorales. Introduction of figured bass.

MUS 213 Theory II (3-0-3)
Prerequisite: MUS 212, or Departmental Approval
Continuation of MUS 212. Realization of figured bass at the piano, harmonization of Bach chorales. Introduction of major-minor seventh and ninth chords above the four basic triads: major, minor, diminished, and augmented.

MUS 290 Seminar/Workshop (1-0-1)
Prerequisite: To be specified for particular subjects.
A seminar/workshop approach featuring specialized instruction and extensive practical application of musical techniques in the fields of vocal and instrumental music.

Nursing

NSG 090 Basic Concepts of Associate Degree Nursing (0-3-0-3)
Prerequisite: Licensed Practical Nurse
Nursing 090 provides a foundation upon which the student develops an understanding of the individual in health and illness. The student becomes more aware of the role(s) and responsibilities of the registered nurse. The student is introduced to each major concept in the identified conceptual framework of the associate degree nursing program. Selected concepts and principles are introduced as a basis for assessment of the client's needs and appropriate intervention.

NSG 101 Concepts to Basic Nursing (6-3-4-8)
Prerequisite: Admission to the ADN Program
This course acquaints the student with basic nursing theory and skills with an overall emphasis in meeting patient needs throughout the life span. The student is introduced to each major concept in the identified conceptual framework of the program. The nursing process, a man's basic needs and body systems are the primary concepts. Developmental theories throughout the life span, communication skills, stress-adaptation theory, the health illness continuum, and the nurse's role are all introduced as basic concepts utilized in nursing care. Provisions are made for the application of classroom knowledge and skills in an on-campus laboratory and in the hospital setting. The student is expected to develop a beginning confidence in the performance skills utilizing appropriate techniques.

NSG 102 Integration of Basic Nursing Concepts (5-3-9-9)
Prerequisite: NSG 101
This course utilizes the basic concepts of NSG 101 and applies the Nursing process to them in meeting the needs of the patient. Integration of Nursing Concepts focuses on health-illness continuum, and post-operative care. Specific problems dealing with pain, infection, neoplasms, chronic illness, death and dying are studied. Certain disease processes are studied including the skin, musculoskeletal, and gastrointestinal. Opportunity is provided for students to apply their performance skills in the on-campus laboratory as well as in the hospital setting. The student is expected to perform competently certain additional skills.

NSG 104 Medical-Surgical Nursing I (5-2-10-9)
Medical-Surgical Nursing I utilizes the knowledge gained in Nursing 101 and Nursing 102 and applies them in the study of specific diseases. Problems of the reproductive, sensory, endocrine, respiratory, cardiovascular, nurologic systems, musculoskeletal, and genitourinary systems are studied. Concepts of human needs, nutrition and the nursing process are integrated. The student is expected to continue developing clinical skills and perform them with competence. Provisions are made for the application of classroom knowledge and skills in the on-campus laboratory.

NSG 132 Pharmacology in Nursing (2-0-0-2)
Prerequisite: NSG 101
NSG 132 covers the principles and skills used in the control, computation, and administration of medications. Major drug classifications are introduced as a basis for continued study of pharmacology in the nursing curriculum.

NSG 201 Maternity Nursing (5-3-12-10)
Prerequisites: NSG 101, 102, 104, 132
Corequisite: PSY 250
NSG 201 is designed around the concept

of families as it relates to the members of the family during the maternity cycle. Major areas of content are normal pregnancy, labor and delivery, postpartum care of the newborn and complications which arise during pregnancy. The nursing process is utilized throughout in dealing with pregnancy and its complications.

NSG 202 Child Health Nursing (5-3-12-10)

Prerequisites: NSG 101, 102, 104, 132

Corequisite: PSY 250

NSG 202 is concerned with meeting the comprehensive health needs of the child and his family during wellness and illness to the end that every child should have the chance to become all that he is capable of becoming. The course begins with a review of the normal growth and development of children from birth through adolescence. Deviations from normal health will be studied with emphasis placed on the nursing process as a means to devise a comprehensive plan of care to meet the needs of individuals and their families.

NSG 203 Medical-Surgical Nursing II (5-0-18-11)

Prerequisites: NSG 101, 102, 104, 132, 201, 202, 204

This course acquaints the student with the person and his/her family who is experiencing complex health problems in the cardiovascular, pulmonary, and neurologic systems of the body. Emphasis is placed on critical and emergency care and advanced nursing techniques. The learner is introduced to management skills and responsibilities necessary for the transition from nursing student to graduate nurse. Additional concepts which are integrated throughout the course include the nursing process, leadership, problem solving, the change process, communication skills, pharmacology, and nutrition. Provisions are made for the application of classroom knowledge and skills in the clinical setting.

NSG 204 Psychiactric Nursing (9-5-12-17)

Prerequisite(s) NSG 101, 102, 104, 132, PSY 229

NSG 204 Psychiactric Nursing deals with the role of the nurse in the care of the emotionally disturbed individual who may or may not be confined to a hospital during his illness. The concept of stress as a factor in mental health is recognized. Difficulties experienced at various of the life span are explored. Various treatment modalities and approaches are examined. Current trends in delivery of care and legal aspects of psychiatry are included. History of the management of care of psychiatric patients is explored.

NSG 206 Comprehensive Nursing (3-0-0-3)

Prerequisite: All nursing courses

NSG 206 focuses on comprehensive nursing care for selected major health problems occurring in today's society. The student will be planning and implementing the nursing process for selected major health problems which the new graduate will encounter as a beginning practitioner. The student will be given the opportunity to solve nursing care problems through class discussion and the use of standardized test.

NSG 207 Perspectives of Nursing Practice (2-0-0-2)

Prerequisite: All nursing courses

An open-ended approach to current issues, problems, and conditions encountered in nursing practice. Legal implication with emphasis on the Nurse Practice Act of North Carolina are explored.

Nursing, Practical

NSG 1011 Fundamentals of Nursing I (6-3-6-9)

Prerequisite: Admission to PN Program

Nursing I is an introductory study of the nursing care which is common to all patients. The student will develop skill in procedures and techniques related to nursing interventions as they pertain to 1) elements of health and disease, and 2) maintenance, support, and reinforcement of natural body defenses. The student will practice procedures and techniques in the college laboratory under the guidance of nursing faculty. Learning experiences are provided which will give the student knowledge and skills at the beginning level to assist the patient in meeting individual needs which arise from health deviations and disabilities. Nutrition, history, introduction to medications, principles of human behavior, and the legal and ethical aspects of nursing care are integrated in the course content.

NSG 1022 Fundamentals of Nursing II (6-3-15-12)

Prerequisites: BIO 1211, NSG 1011, MOA 100, NUT 1101

Nursing II is an introduction to medical-surgical nursing. It is a continuation of the study of the broad concepts of patient care in which the student will develop skills in procedures and techniques related to the nursing of patients with altered body functions, long term illness, and infectious diseases. Opportunity is provided for using previously acquired knowledge as well as that acquired concurrently in planning and implementing nursing care. Nutrition, applied pharmacology, and legal aspects of nursing care are integrated in the course content and clinical experience.

NSG 1033 Maternal & Child Health Nursing (6-0-18-12)

Prerequisites: NSG 1011, NSG 1022, NSG 1232

The purpose of this course is to allow the practical nursing student to continue to utilize and expand their cognitive and manipulative skills. The course utilizes the life cycle approach in both lecture and laboratory instruction. Experiences included are: care of pre-natal, labor, parturition, post-partum, and pediatric patients (neonate through adolescent), with emphasis on needs basic to life.

NSG 1044 Medical-Surgical Nursing (6-3-18-13)
Prerequisites: NSG 1011, NSG 1022, NSG 1032, NSG 1033
The purpose of this course is to continue to prepare the vocational nursing student to use cognitive, judgmental, and manipulative skills necessary to give comprehensive nursing care to adults with specific medical and surgical disorders. Theoretical content is presented to enhance the understanding of patients with disorders of the Central Nervous System, the Integumentary System, the Endocrine System, the Genito-urinary System, and the Eye and Ear. Opportunity is provided for the application and reinforcement of previous knowledge as well as that acquired concurrently in planning and implementing nursing care. Patients will be selected for students' clinical assignments on the basis of student need and to meet the clinical objectives of the day.

NSG 1045 Perspectives in Practical Nursing (2-0-0-2)
Prerequisites: NSG 1011, NSG 1022, NSG 1033
This course is designed to assist the prospective graduate in making the transition from the student role to that of a responsible member of the Health Team. Emphasis will be given to trends in Nursing as they affect Practical Nurses; responsibilities, provisions, and limitations of licensure; and career options available to Licensed Practical Nurses.

NSG 1232 Pharmacology in Nursing (3-0-0-3)
Prerequisite: NSG 1011
This course is designed to help the student gain an in-depth knowledge of drug classification, administration, calculation, and the related nursing responsibilities. The course takes the student from the general principles of pharmacology and skills in calculations to the study of actions, uses, and required nursing behavrious for safe clinical practice.

Nutrition

NUT 101 Nutrition (3-0-3)
Prerequisite: None
A basic course in normal and therapeutic nutrition for Registered Nursing students, with emphasis on specific diet as patient therapy, patient meal planning, and patient counseling and nutritional instruction.

NUT 1101 Nutrition (3-0-3)
Prerequisite: None
A basic course in normal and therapeutic nutrition for Practical Nursing students, with emphasis on the nutrients necessary for food health, and patient interactions in the nutritional area.

Orientation

ORI 090 Orientation/Study Skills (3-0-3)
Prerequisite: None
A course designed to improve study skills, notetaking, organization, time management, test taking, mapping, marking and underlining, analyzing course requirements and use of study time, developing study schedules, outlines, and improving handwriting. A diagnostic pre-test identified areas of weakness. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

Physical Education

PED 100 Volleyball (0-2-1)
Prerequisite: None
Includes fundamental skills, strategy, and rules through participation in volleyball.

PED 101 Football, Soccer (0-2-1)
Prerequisite: None
Includes fundamental skills, strategy, and rules through participation in flag football and soccer.

PED 102 Softball (0-2-1)
Prerequisite: None
Includes rules and skills through participation in softball.

PED 103 Swimming (0-2-1)
Prerequisite: None
Beginning swimming and/or swimming skills for advanced swimmers.

PED 104 Bowling (0-2-1)
Prerequisite: None
Includes fundamental skills, scoring, rules, and etiquette through participation.

PED 105 Archery (0-2-1)
Prerequisite: None
Includes fundamental skills and knowledge through participation in the activity.

PED 106 Golf (0-2-1)
Prerequisite: None
Includes skills and knowledge stressing social value. Beginning.

PED 107 Basketball (0-2-1)
Prerequisite: None
This course includes rules and strategies, scoring, officiating, and participation in basketball.

PED 108 Skiing (0-3-1)
Prerequisite: None
Includes fundamental skills, techniques, and knowledge through participation. Beginning.

PED 111 Tennis (0-2-1)
Prerequisite: None
A thorough coverage of fundamental skills, strategy, rules, and scoring through participation in the sport. Beginning.

PED 112 Modern Dance (0-2-1)
Prerequisite: None
A course designed to include the study of basic rhythmics and fundamental movements of modern dance. Beginning.

PED 113 Gymnastics & Tumbling (0-2-1)
Prerequisite: None
The course will include participation in tumbling, gymnastics, apparatus, stunts, and pyramid building.

PED 114 Karate (0-2-1)
Prerequisite: None
Karate is an ultimate form of unarmed self-defense. It is regarded as an excellent way to exercise, control weight, and develop fitness. It is approached as a beautiful and highly skilled oriental art, and as a highly skilled sport using skills and control techniques without bodily contact.

PED 117 Roller Skating (0-3-1)
Prerequisite: None
An analysis of the fundamental skills, techniques, and knowledge through participation in skating. Beginning.

PED 118 Square Dancing (0-2-1)
Prerequisite: None
Includes a study of the basic figures found in American square dances and the performance of the dance themselves.

PED 120 Intermediate Tennis (0-2-1)
Prerequisite: PED 111 and Departmental Approval
A continuation of skills from basic to more advanced fundamentals. Emphasis is given to improving skills, strategy, and techniques. Doubles and mixed doubles are thoroughly covered. Special emphasis is given to the competitive aspects.

PED 201 Introduction to Physical Education (5-0-5)
Prerequisite: None
Designed for students who expect to teach or coach. Includes the history of health education and physical education; philosophical, psychological, physiological, and sociological background for the teaching of health and physical education; basis for program and organization of activities.

PED 210 Health Education (3-0-3)
Prerequisite: None
A course designed to present basic personal health knowledge, and to develop proper health habits and attitudes in the individual.

PED 220 Theory & Practice of Coaching Baseball (1-2-2)
Prerequisite: None
This course deals with the theory and methods of coaching baseball. Emphasis is given to rules, strategies, and techniques.

PED 221 Theory & Practice of Coaching Basketball (1-2-2)
Prerequisite: None
This course deals with the theory and methods of coaching basketball. Emphasis is placed on rules, game strategy, and selected techniques of coaching basketball.

PED 222 Theory & Practice of Coaching Football/Soccer (1-2-2)
Prerequisite: None
This course deals with the theory and methods of coaching football/soccer. Emphasis is placed on rules, game strategy and selected techniques of coaching football/soccer.

PED 225 Physical Fitness (0-2-1)
Prerequisite: None
This course is designed to provide an individualized approach to physical fitness. Major emphasis will be given to the scientific basis for setting up and engaging in personalized physical fitness programs.

PED 226 Physical Conditioning (0-6-3)
Prerequisite: Departmental Approval
This course is designed for developing a higher degree of physical fitness. Major emphasis will be given to cardiovascular and muscular endurance.

PED 230 First Aid (3-0-3)
Prerequisite: None
This course deals with emergency treatment of various types of injuries, control of bleeding, artificial respiration, transportation, splinting and bandaging, and legal responsibilities. It includes cardiopulmonary resuscitation. (CPR)

PED 231 Advanced Life Saving (2-2-3)
Prerequisite: All candicates must pass a swimming competency exam.
The course is designed to provide the individual with the abilities to protect himself and others around water. The course deals more specifically with rescues

related to water type emergencies. Successful completion results in certification as an Advanced Life Saver by the American National Red Cross.

PED 240 Sports Officiating (1-2-2)
Prerequisite: None
Study of rules, officiating techniques, and the teaching of procedures concerning football and soccer. A definite number of hours also will be assigned for practical experience in officiating during the respective intramural activities.

PED 241 Sports Officiating (1-2-2)
Prerequisite: None
Study of rules, officiating techniques, and the teaching of procedures concerning basketball and volleyball. A definite number of hours also will be assigned for practical experience in officiating during the respective intramural activities.

PED 242 Sports Officiating (1-2-2)
Prerequisite: None
Study of rules, officiating techniques, and the teaching of procedures concerning baseball and softball. A definite number of hours also will be assigned for practical experience in officiating during the respective intramural activities.

PED 260 Outdoor Living (1-2-2)
Prerequisite: None
Outdoor living is designed to acquaint the beginning camper with various aspects of the camping experience ranging from elementary camp procedures to more advanced outdoor survival. Emphasis is given to both classroom knowledge and the practical application of camping techniques and procedures. Field experience is interspersed throughout the quarter.

PED 270 Motor Development & Movement in Early Childhood (4-2-5)
Prerequisite: None
A study of the motor development of the young child with emphasis given to physical and psychological development through the medium of physical activity. This course is designed to assist individuals who plan to work with young children by providing knowledge, skills and concepts for planning, organizing, teaching, and evaluating a program of activities.

Philosophy

PHL 200 Introduction to Philosophy (3-0-3)
Prerequisite: None
Philosophy 200 is designed to provide an introduction to the nature and scope of questions arising in the ever-changing arena of life through an introduction to the kinds of philosophy that men live by. Consideration will be given to the following subjects: metaphysics, epistemology, axiology, logic, idealism, realism, pragmatism, neothomism, naturalism, and existentialism.

PHL 201 Ethics: Problems for a Just Society (3-0-3)
Prerequisite: None
This course is to acquaint students with primary sources of significant thinking on contemporary issues and how they relate to the leading developments in the history of moral philosophy.

PHL 203 Introduction to Logic (5-0-5)
Prerequisite: None
A course designed to acquaint the student with the principles, methods, structures of induction, deduction, verification, and logical implications of ordinary language.

PHL 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subjects
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning Philosophy.

Photography

PHO 101 Introduction to Photography (0-6-3)
Prerequisite: None
Photography 101 is an introductory study of basic theory, principles, and techniques of black and white and color picture photography. Photography as an art, a profession, a tool, and a hobby will be discussed. The use of the 35mm camera and basic development and enlargement practices will be of primary lab concern.

Physics

PHY 101 Physics: Properties of Matter (3-3-4)
Prerequisite: BUS 111
A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with heat, electricity, and magnetism, which are topics included in this course.

PHY 111 Mechanics (3-3-4)
Prerequisite: MAT 111
An analytical approach to the principles of mechanics. Subject matter includes measurement, vector and scalar quantities, force and motion, work and energy, statics, elasticity, and fluids. Emphasis is placed on problem solving and engineering applications. Lectures, problem drill, and laboratory work are coordinated to enable a better understanding of physical

principles. This is not a calculus based course.

PHY 112 Heat, Sound, and Light (3-3-4)
Prerequisites: MAT 111, PHY 111
An introduction to the principles of heat, sound, and light. Subject matter to include thermal behavior of matter, heat transfer, wave motion, sound production, sound reception and control, illumination, refraction, dispersion, lenses, interference and diffraction. Laboratory work and problems solving to parallel work in the classroom. This is not a calculus based course.

PHY 113 Electricity, Magnetism and Modern Physics (3-3-4)
Prerequisites: ELC 101 or PHY 112
A study of electricity, magnetism, and modern physics. Subject matter includes electrostatics, magnetism, basic electric circuits, electromagnetism, alternating-current, introduction to vacuum-tube and solid state electronics, relativity, quantum theory of the atom, and nuclear energy. Emphasis is placed on problem solving appropriate to engineering technology. Laboratory work to parallel work in classroom. This is not a calculus based course.

PHY 211 Mechanics (4-3-5)
Prerequisite: MAT 106
An introduction to mechanics. Subject matter includes vector and scalar quantities, static and dynamic systems of forces, translational and rotational motion with variable acceleration, work, and energy, hydrostatics and hydrodynamics, elastic properties of matter and harmonic motion. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.

PHY 212 Heat, Sound & Light (4-3-5)
Prerequisites: PHY 211 and MAT 107
An introduction to the principles of heat, sound, and light. Subject matter includes heat measurements, heat transfer, the laws of thermodynamics; wave motion; acoustical phenomena; the nature and propagation of light; reflection and refraction; lenses and optical instruments; interference and diffraction; and polarization. Emphasis is placed on problem solving and engineering applications. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.

PHY 213 Electricity & Magnetism: Atomic Physics (4-3-5)
Prerequisites: MAT 206 and PHY 212
An introduction to electricity and magnetism and atomic physics. Subject matter includes electrostatics, capacitance and dielectrics, potential; chemical and thermal electromotive force; electromagnetism; electrical instruments; electromagnetic induction; motors and generators; alternating currents; transient circuits; thermionic emission; wave mechanics; radioactivity; and nuclear reactions. Emphasis placed on problem solving and engineering applications. Laboratory exercises are coordinated with classroom work. Designed for students whose curriculum requires a calculus oriented course.

PHY 1111 Basic Mechanics (3-3-4)
Physical principles of force, energy, work, and power; equilibrium and the laws of motion; principles of machines, mechanical advantage, and transmission of power. Basic principles of heat, light and sound applications to the future craftsman.

PHY 1112 Basic Electricity (3-3-4)
Basic principles of electricity, types of electricity, and its production, transmission, and transformation. Such factors as the electron theory, electrical measurement, magnetism, electromagnetism, and magnetic effects of electricity constitute major areas of study.

PHY 1122 Hydraulics and Pneumatics (3-3-4)
A physical and mathematical study of the fundamental principles of fluid (liquids and gases) mechanics and their application to practical problems. Terminology will be included as well as application of pressure, fluid flow, volume displacements, force resolutions, Bernoulli's Principle, and pneumatics.

Political Science

POL 108 Nature & Function of Law in Society (3-0-3)
Prerequisite: None
The presentation of a philosophical and historical appreciation of what law is within the framework of social order. In addition to an analysis of how our present laws came to be, particular emphasis will be placed on the way in which our present day society utilizes the law as a social control device. Also offered as LAW 103.

POL 110 Introduction to American Federal Government (5-0-5)
Prerequisite: None
A basic course dealing with democratic theory, the evolution of the American constitution and political institutions in the U.S., and the role of the people in American politics, and the relationship of the individual to the federal grant in the area of civil rights and liberties.

POL 201 International Relations (3-0-3)
Prerequisite: None
A study discussion course on key foreign policy topics based on the "Great Deci-

sions" program outlined each year by the non-partisan Foreign Policy Association.

POL 203 State & Local Government (5-0-5)
Prerequisite: None
A study of typical state and local political institutions and practices in America, with special emphasis upon the governmental organization and political problems of the state of North Carolina and its communities.

POL 280 Topical Travel Study (2-12-6)
Prerequisite: None
See ANT 280 for course description.

POL 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subjects
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning a topic in Political Science.

Psychology

PSY 090 Psychology of Self (3-0-3)
Prerequisite: None
This course is designed to improve student knowledge of personality, self concept and world of work. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements. (not approved for VA Benefits)

PSY 100 Individual Human Potential (2-0-2)
Prerequisite: None
The course is designed to help each student discover and actualize his unique capacities, strengths, talents, and abilities. Through this experience, persons are led to live more creative, productive, satisfying lives.

PSY 103 Psychology of Human Relations (3-0-3)
Prerequisite: None
A basic knowledge of psychological principles is studied to provide insight into personal behavior and recognition of human relations skills needed in the business world.

PSY 111 Industrial Psychology (3-0-3)
Prerequisite: None
A study of psychological terms, language and concepts with emphasis toward industrial and management applications. Psychological approaches to industrial situations are studied to determine solutions that increase the effectiveness of people.

PSY 201 General Psychology (5-0-5)
Prerequisite: None
A survey of the field including learning, emotions, motivation, abnormal behavior, psychotherapy, and developmental psychology. (Credit will not be given for PSY 201 and PSY 101 or PSY 102.)

PSY 203 Child Psychology (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
A study of the child from conception through pre-adolescence. Physical, biological, social, intellectual, emotional and personality development are emphasized in the course designed to promote an understanding of the behavior and needs of the child.

PSY 204 Adolescent Psychology (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
The physical, biological, social, intellectual, and emotional changes occurring during adolescence are considered in relation to their effect on the development and personality in the individual. School, social, and personality problems are considered in the understanding and guidance of youth.

PSY 205 General Psychology Lab (1-2-2)
Prerequisite: PSY 201 or Departmental Approval
An introduction to the scientific study of behavior, to laboratory procedures, and to laboratory equipment. The goals of the course include familiarizing students with the principles and vocabulary of experimentation, sources of psychological information, practice in conducting and serving in laboratory projects, and writing in APA format.

PSY 206 Psychology of Adjustment (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
The study of the process of adjustment. Consideration is given to psychological reactions to critical problems encountered in modern life. Different approaches to psychotherapy will be introduced.

PSY 210 Elementary Statistics (5-0-5)
Prerequisite: MAT 101 or equivalent
A non-calculus treatment of technique and procedures for handling data. Topics include: analysis of data, probability, binomial and normal distributions, hypothesis testing, t-distribution, Chi-square distribution, F distribution, and analysis of variance. Also offered as MAT 210.

PSY 229 Abnormal Psychology (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
An analysis of the symptoms, contributing factors, treatment and outcomes of maladjustive behavior. Classification and nomenclature of psychoneurosis, psy-

choses, personality disorders, and other psychopathological disorders are discussed.

PSY 230 The Psychology of Aging (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
A survey course concerning the changing process and the changed individual from adolescence through old age. Physical, social, and psychological changes occurring in late middle age and old age will be emphasized.

PSY 250 Life-Span Psychology (5-0-5)
Prerequisite: PSY 201 or Departmental Approval
A study of the individual from conception through old age. Physical, biological, social, intellectual, emotional and personality development are emphasized in the course designed to promote an understanding of the behavior and needs of the individual at the various stages of life.

PSY 290 Psychology Seminar/ Workshop (1-0-1)
Prerequisite: May be specified for particular subjects
A seminar/workshop approach involving the student in discussions and/or projects on a topic in psychology.

PSY 1102 Human Relations (2-0-2)
Prerequisite: None
Development of understanding of relationships to other persons through some of the basic principles of human psychology. The problems of the individual and his work situation are studied in relation to the established organization of modern business and industry and in relation to government practices and labor organization, with special emphasis on the operating responsibilities of good management.

Reading

RDG 091 Reading Improvement (5-0-5)
Prerequisite: None
A course designed to improve student's basic reading skills, topics including reading comprehension, vocabulary, word attack skills and recognition. A diagnostic pre-test identifies areas of weakness. A grade of S (for satisfactory progress) is given each quarter until course requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

RDG 092 Speed Reading (3-0-3)
Prerequisite: RDG 091 or placement test proficiency equivalent
A course designed to improve student's rate of comprehension, broaden the span of word group recognition, and increase eye coordination. A diagnostic pre-test identifies areas of weakness. A grade of S (for satisfactory progress) is given each quarter until requirements are complete at which time the student will receive a grade. Credit may not count for associate degree requirements.

RDG 101 Reading Improvement (5-0-5)
Prerequisite: None
The course is designed for students interested in improving their skills of reading, and to promote each reader's understanding of his own potential by knowing his strengths, weaknesses, and levels of reading achievement. The course will cover critical reading, rapid visual perception surveying, vocabulary, scanning, and other skills necessary for reading efficiently during and after the college years.

RED 101 Introduction to Reading Education (3-3-4)
Prerequisite: None
Identification of the role of the Teaching Associate or aide in the public school with particular emphasis upon assisting with the reading program. The student will study the organization of public school at all levels and look at varying school environments, the relationship among school personnel and professional work behavior. Laboratory experiences will consist of observation in various elementary school settings and a variety of reading teaching settings.

RED 102 Methods, Materials, & Techniques of Teaching Reading I (5-6-7)
Prerequisite: None
An overview of the major approaches to the teaching of children/adults to read. A major emphasis will be the study and utilization of materials actually found in the laboratory setting. Additional stress will be placed upon the acquisition of the vocabulary specific to reading education and to the piloting of reading lessons with small groups of school children.

RED 103 Methods, Materials, & Techniques of Teaching Reading II (5-6-7)
Prerequisite: RED 102
An overview of the major approaches to the teaching of children/adults to read. A major emphasis will be the study and utilization of materials actually found in the laboratory setting. Additional stress will be placed upon the acquisition of the vocabulary specific to reading education and to the piloting of reading lessons with small groups of school children.

RED 110 Introduction to Reading (4-2-5)
Prerequisite: None
Identification of the role of the Teaching

Associate or aide in the public school setting with particular emphasis upon assisting with the reading program. The student will study the organization of public schools and look at varying school environments, the relationships among school personnel, and develop professional work behavior. Laboratory experiences will consist of observation in various elementary school settings and a variety of reading/teaching settings.

RED 111 Reading Methods—Approaches (4-2-5)
Prerequisite: RED 110 or EDU 101
An overview of the major approaches to the teaching of reading. A major emphasis will be the study and utilization of materials actually found in the classroom setting. Additional stress will be placed upon the acquisition of the vocabulary specific to reading education and to the designing of reading lessons with small groups of school children.

RED 112 Reading Methods—Skills (4-2-5)
Prerequisites: RED 110 and 111 or EDU 101 and RED 110
An in-depth study of the skills required for reading-phonics, structural analysis, context, dictionary skills, and comprehension skills. Additional stress will be placed upon the diagnosis of children's needs and the prescription of activities appropriate to meet those needs.

RED 202 Evaluation of Reading Programs, Teaching Materials, & Achievement Tests (4-3-5)
Prerequisite: None
A study of the formal and informal methods of assessing pupil growth in reading. The course will also touch upon those other areas of educational evaluation that parallel reading assessment. Students will acquire a systematic method of evaluating instructional materials. Attention will be devoted to role of the Teaching Associate within a school-wide reading program and a school or system-wide scheme of pupil assessment.

RED 203 Reading in Content Areas (3-6-5)
Prerequisite: None
An exploration of the role of reading abilities in mastering content (mathematics, science, social studies, etc.) materials. The student will be required to translate knowledge of reading and the reading process into lessons designed to teach "content." It is expected that the student will rely upon the expected non-reading textbooks.

RED 204 Seminar & Practice in Reading Education I (2-6-4)
Prerequisite: None
A guided field experience designed to implement earlier course work. The student will be required to provide instruction in reading to small groups of children. Direct supervision and weekly discussion of the Associate's progress will be a feature of the course. It is expected that the student will actively participate in the seminar under the guidance of a faculty member.

RED 205 Seminar & Practice in Reading Education II (2-6-4)
Prerequisite: RED 204
An extension of 204. Specific attention will be devoted to assessing the extent to which the Associate can integrate concurrent coursework in Content Reading into reading instruction. Weekly seminars will center upon community and school influences for the evolution of the teaching of reading. Seminar topics will also be drawn from the Associate's laboratory work during the previous week.

RED 206 Supervised Internship in Reading Education (4-30-14)
Prerequisites: RED 103 and RED 205
A course designed to meet in the laboratory setting for four complete days each week. The Associate will be expected to demonstrate those competences acquired during the program's earlier coursework. On-going supervision of the Associate will center upon techniques for incorporating knowledge of children, reading, the community and the school into a coherent instructional program of reading education. In addition to individual and small-group teaching, large-group instruction will be expected.

Recreation

REC 103 Swimming (0-2-1)
Prerequisite: None
Beginning swimming and/or swimming skills for advanced swimmers. Also offered as PED 103.

REC 104 Bowling (0-2-1)
Prerequisite: None
Includes fundamental skills, scoring, rules and etiquette through participation. Also offered as PED 104.

RED 105 Archery (0-2-1)
Prerequisite: None
Includes fundamental skills and knowledge through participation in the activity. Also offered as PED 105.

REC 108 Skiing (0-3-1)
Prerequisite: None
Includes fundamental skills, techniques, and knowledge through participation. Beginning. Also offered as PED 108.

REC 112 Modern Dance (0-2-1)
Prerequisite: None
A course designed to include the study of

basic rhythmics and fundamental movements of modern dance. Beginning. Also offered as PED 112.

REC 114 Karate (0-2-1)
Prerequisite: None
Karate is an ultimate form of unarmed self defense. It is regarded as an excellent way to exercise, control weight, and develop fitness. It is approached as a beautiful and highly skilled oriental art and as a highly skilled sport using skills and control techniques without bodily contact. Also offered as PED 114.

REC 117 Roller Skating (0-3-1)
Prerequisite: None
An analysis of the fundamental skills, techniques, and knowledge through participation in skating. Beginning.

REC 260 Outdoor Living (1-2-2)
Prerequisite: None
Outdoor living is designed to acquaint the beginner camper with various aspects of the camping experience ranging from elementary camp procedures to more advanced outdoor survival. Emphasis is given to both classroom knowledge and the practical application of camping techniques and procedures. Field experience is interspersed throughout the quarter. COED. Also offered as PED 260.

Religion

REL 101 World Religion (3-0-3)
Prerequisite: None
A historical survey of the origin, development, beliefs, and practices of the major living faiths. To introduce the student to the origin and development of religions, contemporary "primitive" religions, ancient national religions, and the religions of India.

REL 102 Old Testament Survey (3-0-3)
Prerequisite: None
An introduction to the history, literature, religion, and personalities of the Old Testament.

REL 103 New Testament Survey (3-0-3)
Prerequisite: None
An introduction to the history, literature, personalities, and religion of the New Testament.

REL 210 "The Christians" (3-0-3)
Prerequisite(s): None
A series of 13 films presenting the history of Western man through the eyes of the Christian Church, with special emphasis placed upon the growth of the new religion from its earliest days to the challenges faced by Western Civilization and the Christian religion in the 20th century. (Same as HIS 210)

REL 290 Seminar/Workshop (1-0-1)
Prerequisite: may be specified for particular subjects.
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning a topic in Religion.

Broadcasting—Radio/ Television

RTV 1101 Introduction to Broadcasting (4-3-5)
Prerequisite: None
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, copywriting, production, promotion, programming, sales, and administration.

RTV 1102 Broadcast Announcing & Performance I (4-3-5)
Prerequisite: RTV 1111 or Departmental Approval
A study of the announcer's function, skills, characteristics and techniques with emphasis on the analysis, interpretation and communication of a variety of types of announcing-performance projects. The course is further designed to familiarize the student with basic radio and television studio equipment and broadcast procedures.

RTV 1103 Broadcast Announcing & Performance II (4-3-5)
Prerequisite: RTV 1101-1102 or Departmental Approval
A continuation of RTV 1102. Advanced study of the announcer's techniques with practice sight reading of all types of continuity. Designed to give the student background and experience in relating his speech, personality, character and temperament to broadcast speech communication.

RTV 1104 Broadcast Practicum(1-18-7)
Prerequisite: Departmental Approval
On-the-job training at either the campus facility, a local commercial station, or both. This will enable the student to observe and take part in the actual functioning of a station. Reports of the student's progress will be made bi-monthly.

RTV 1111 Broadcast Speech (3-3-4)
A detailed study of basic broadcast speech with consideration of elementary vocal anatomy and the fundamentals of the science of sound. Emphasis will be on common problems and methods of improving voice quality, diction and delivery; vocabulary improvement and oral reading skills.

RTV 1112 Broadcast Copywriting & Commercial Production (4-3-5)
Prerequisite: None
The development and practice of writing and producing the advertising message. Emphasis is on combining salesmanship and showmanship through the proper utilization of copy formulas, techniques and styles with production approaches and techniques.

RTV 1113 Broadcast Sales & Promotion (3-3-4)
Prerequisite: None
An examination of sales philosophy, rate structure, rate cards and other sales tools, planning budgets and schedules, preparing and delivering sales presentations, obtaining and retaining accounts, and a look at agencies, "reps," administration and compensation. This course will also include a study of audience and sales promotion including objectives, media, and techniques.

RTV 1114 Broadcast Administration (3-0-3)
Prerequisite: None
A study of station organization and operations, financial considerations, departmental relationships, personnel policies and requirements, files, systems and regulations. This will also include a discussion of the social, economic, and legal responsibilities of a broadcast operation, and provide the student with realistic opportunities to solve administrative problems.

RTV 1115 Broadcast Public Affairs (2-0-2)
Prerequisite: Departmental Approval
A detailed study of the social and legal responsibilities of a broadcast station including the ascertainment and evaluation of community needs and the programming to meet these needs. Emphasis will be on practical application and will utilize the Statement of Program Service of the broadcast license renewal form and other guidelines of the Federal Communications Commission.

RTV 1121 Broadcast Reading Skills (5-0-5)
Prerequisite: Departmental Approval
Development of oral reading abilities. Includes review and improvement of silent reading abilities, speed and comprehension. Also stresses vocabulary building, interpretive reading and the use of intonation and inflection to convey meaning. Diagnostic testing is to be used at the beginning and end of the course to identify and measure progress on such problems as reversals, additions, omissions, improper time-buying in reading and recognition of punctuation. The course is designed to expose the student to the needed skills in effective transition from written communication to spoken communication.

RTV 1122 Broadcast Programming, Formats & Systems (3-0-3)
Prerequisite: None
A study of broadcast programming philosophy and station image, audience identification, determination, and measurement; sources and effects of commercial and public service programs, specialized formats and programming systems, and of NAB programming codes and FCC programming rules.

RTV 1123 Radio News Gathering, Writing, Announcing (3-3-4)
Prerequisite: RTV 1111, 1102 or Departmental Approval
An introduction to the field of broadcast journalism, with special emphasis placed on the gathering, writing, editing, processing and announcing of news and specialty programs, including documentaries.

RTV 1125 FCC Rules & Regulations (2-0-2)
Prerequisite: Departmental Approval
A study of the provisions of laws, treaties, regulations, and operating procedures and practices with which every radio operator should be familiar.

RTV 1132 Broadcast Operations Practicum (1-6-3)
Prerequisite: None
The practical application of fundamental processes and procedures utilized in broadcast control and studio areas including audio and video equipment operation, logging, announcing and formats.

RTV 1133 Broadcast Projects (3-3-4)
Prerequisite: Departmental Approval
In this course, students will be assigned special projects in their particular area of interest and will be supervised by the faculty.

RTV 1135 Radio Sportscasting (1-3-2)
Prerequisite: RTV 1111, 1102, or Departmental Approval
An introduction to the field of radio sportscasting including the gathering, writing, processing, and announcing of sports news, and play-by-play announcing of various sports.

RTV 1145 Broadcast Independent Study (0-3-1)
Prerequisite: Departmental Approval
This course provides the student with an opportunity to broaden his knowledge or skills in specific areas.

Sociology

SOC 102 Introductory Sociology (5-0-5)
Prerequisite: None
A consideration of the origins and development of culture, the nature of personality and its relation to society, forms of collective behavior, and community and social organization.

SOC 103 Marriage & Family Relations (3-0-3)
Prerequisite: None
A practical consideration and discussion of the factors leading to successful marital adjustment; attention is given to the period from early dating to marriage, the coming of children, and the problems of child rearing. The course also deals with sex adjustment, in-law relationships, religion, and money management. Not to be taken by Sociology majors.

SOC 109 Community Resources(3-0-3)
Prerequisite: None
A study of the resource and service agencies in the community that may be used as a supportive service to industry, education, and other human service institutions. A practicum experience is closely correlated with classroom activities so that students may apply knowledge and skills to an on-the-job learning situation.

SOC 110 Human Sexuality (3-0-3)
Prerequisite: Recommend PSY 201 or SOC 102
A study of male and female sexuality including such relevant subjects as: reproductive anatomy and physiology, male and female sexual responses, the development of sexual attitudes and values, and the development of a healthy personal and interpersonal sexuality.

SOC 202 Contemporary Social Problems (5-0-5)
Prerequisite: SOC 102
A course designed to study contemporary personal and social disorganization and possible ameliorative action on the part of the community and society.

SOC 203 Sociology of the Family (5-0-5)
Prerequisite: SOC 102
A study of the family as a social institution and of such related institutional patterns as dating, courtship, marriage, and divorce. Offered On Demand.

SOC 214 Introduction to Social Service (3-0-3)
Prerequisite: None
This course is designed to introduce the student to those institutions, public and private, which perform designated human and social service functions in society. Agencies may include those whose primary function is financial assistance, corrections, mental health services, family counseling, and child welfare services. Examination is made of social interventive methods utilized to solve social problems.

SOC 215 Interpersonal Relations (3-0-3)
Prerequisite: None
A basic course dealing with interpersonal and communicative skills utilized in helping relationships. Examination is made of barriers which prohibit communication and hamper the helping process. Students will learn techniques of interviewing for specific purposes and acquire basic abilities in working with people.

SOC 216 Problems & Issues in the Human Services (3-0-3)
Prerequisite: SOC 214
This course identifies the problems, issues, and concerns to which the human services are addressed. Various methodologies for developing ameliorative measures to solve human problems will be stressed. Techniques and strategies for identifying the issues and concerns that arise in the human services will be discussed.

SOC 218 Group Dynamics (3-0-3)
Prerequisite: SOC 102
An examination of the structure in terms of membership and leadership of various types of groups, emphasizing the group process, will comprise the main content of the course. Consideration will be given to goals and strategies associated with social change and how the human services can serve as a "change agent" when this becomes necessary and practical.

SOC 240 Seminar & Practicum (0-10-1)
Prerequisites: Completion of 50 hours in SSA program and approval of instructor.
The seminar/practicum experience involves the student in on-the-job training and field work. The experience enables the student to gain exposure to many of the functions associated with human/social services. This on-the-job field work will be coordinated with the needs of the social service organization to which the student is assigned.

SOC 280 Study Tour (2-12-6)
Prerequisite: None
A five week, condensed course involving three weeks of intensive study on the campus of Gaston College, followed by two weeks of off-campus study and travel. This course may involve travel within the United States or abroad as an open laboratory experience for students. This course involves interdisciplinary study including history, culture, art, architecture, music, politics, etc., with special emphasis given

to one or more of these topics. Also offered as ANT 280, HIS 280, and POL 280.

SOC 290 Seminar/Workshop (1-0-1)
Prerequisite: May be specified for particular subjects
A seminar/workshop approach involving the student in lectures, discussions, projects, and/or travel concerning Sociology.

Spanish

SPA 100 Conversational Spanish (5-0-5)
Prerequisite: None
This is a one-quarter course for students desiring a basic vocabulary and the ability to engage in simple conversation. This course is designed as a study of the Spanish people, their language, and their culture with emphasis on fundamental sounds and structures of the language. This course is planned for beginning students or those desiring to up-grade previously acquired skills in Spanish.

SPA 101 Elementary Spanish (5-0-5)
Prerequisite: None
This is a beginning course which stresses the basic language skills—listening, speaking, reading, and writing—along with cultural aspects.

SPA 102 Elementary Spanish (5-0-5)
Prerequisite: SPA 101 or Equivalent
This is a course which stresses the continuing development of the basic language skills and cultural studies.

SPA 201 Intermediate Spanish (5-0-5)
Prerequisite: SPA 101 and 102 or 2 years high school Spanish
This is a course which reinforces the basic language skills. It includes extensive readings, a grammar review, and cultural studies. Stress is given to spoken and written expression.

SPA 202 Intermediate Spanish (5-0-5)
Prerequisite: SPA 201 or Equivalent
This is a course which stresses spoken and written expression. It includes a grammar review, extensive readings, and cultural studies.

SPA 250 Independent Study (5-0-5)
Prerequisite: Departmental Approval
A student who has completed the first two years of Spanish may elect this course. The nature of the course and the amount may be determined by consultation with the instructor.

Welding

WLD 1101 Oxyacetylene Welding (3-12-7)
Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction.

WLD 1102 Arc Welding (3-12-7)
The operation of A.C. Transformers and D.C. motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course.

WLD 1104 Advanced Welding (3-12-7)
Student is given an opportunity to specialize and review gas, arc and/or inert welding.

WLD 1111 Gas Welding Fundamentals (0-3-1)
Gas welding demonstration by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, and flame-cutting methods applicable to mechanical repair work.

WLD 1112 Arc Welding Fundamentals (0-3-1)
Arc welding demonstrations by the instructor and practice by the students. The operation of AC & DC arc welding machines. Studies are made of welding heats, polarities and electrodes. Practice will be given for making groove and fillet type welds.

WLD 1113 Inert Gas Welding (6-9-9)
Prerequisite(s): WLD 1101
Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding. (Formerly WLD 1103)

WLD 1123 Blueprint Reading For Welders (0-3-1)
Advanced blueprint reading as related to actual complete detail drawings found in welding shops.

WLD 1131 Gas and Arc Welding (2-3-3)
Prerequisite(s): WLD 1111 and WLD 1112 or Equivalent

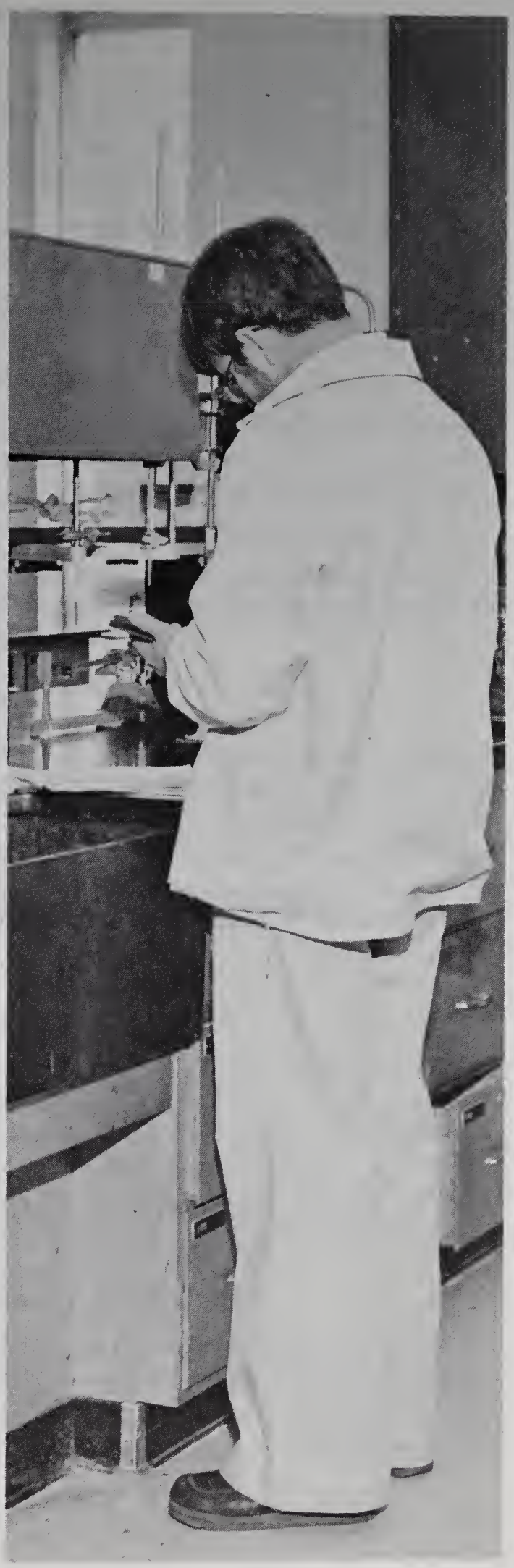
This is a course which reinforces the basic gas and arc welding fundamentals. It includes the advancement of welding thicker metals in the various positions. More practice in cutting and a better knowledge of the electrodes.

WLD 1133 Mechanical Testing & Inspection (2-3-3)
The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destuctive, free-bend, guided-bend, nick-tear, notched-bend, non-destructive, B-notch, Charpy impact, etc.

WLD 1134 Introduction To Pipe Welding (3-12-7)
Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position shielded metal arc welding processes according to Section IX of the ASME code.

WLD 1144 Estimating (4-0-4)
Cost estimates are prepared from actual shop prints.

WLD 1163 Gas & Arc Welding (2-3-3)
Prerequisite(s): WLD 1111 and 1112 or the equivalent
This is a course which reinforces the basic gas and arc welding fundamentals. It includes the advancement of welding thicker metals in the various postions. More practice in cutting and a better knowledge of the electrodes.



GENERAL INFORMATION

STATEMENT OF PURPOSE

Gaston College is a comprehensive community college which seeks to be of optimum educational service to the people within its geographic area. Gaston College, concerned equally with the needs of individuals and the needs of the community, commits its resources to fulfill the following purposes:

To provide for the college oriented student the first two years of academic college courses.

To meet for industry, business, government, and service occupations the pre-service and in-service manpower training needs that require up to and including the Associate of Arts degree.

To provide educational opportunity for the population of this area, including the numerous individuals who are experiencing social and economic difficulty that is due to handicapping attitudes and work habits or who have inadequate basic general education or who lack salable skills.

To raise the level of personal fulfillment, of responsible citizenship, and the standards of living of the people of the area through advanced general and continuing educational opportunities.

ABOUT THE COLLEGE

Gaston College was granted a charter by the State of North Carolina in 1963 and began its first classes in temporary headquarters in September of 1964. The College moved to its permanent campus on Highway 321 between Dallas and Gastonia two months later. Serving both Gaston and Lincoln counties, Gaston College enrolls approximately 3,000 students each quarter in curriculum programs and averages 11,000 students annually in its Continuing Education and Community Service Programs.

FACILITIES

The nine major buildings which comprise the Gaston College campus contain approximately 300,000 square feet and have an estimated current value of $16,500,000. An efficient road system and parking for more than 1,000 cars are available for the thousands of vehicles that enter and leave the campus daily. College facilities are available for public use and may be scheduled through the office of the Vice-President of Administrative Services and Development.

CHILD CARE TRAINING CENTER

The Child Care Training Center on the campus of Gaston College provides child care through a creative learning environment for children, ages eighteen months to five years. Children of faculty, staff, students, and the community are accepted and enrolled according to the date of application and availability of space. The hours of the Center are 7:30 a.m. to 5:30 p.m.

Gaston College Board of Trustees

Mr. Earl T. Groves, Chairman
Mr. Thebaud Jeffers, Vice Chairman

Appointed by the Governor of North Carolina:
Mr. Tom D. Efird, Gastonia, NC 1985
Mr. Earl T. Groves, Gastonia, NC 1989
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Appointed by Gaston County Board of Education:
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Student Government Association President
Mr. James H. Lopp, Jr., 1982-83

Dr. W. Wayne Scott, President
and Secretary to the Board of Trustees

Gaston College Foundation, Inc. Board of Directors

Mr. James T. Comer, President
Mr. Henry H. Massey, Jr., Vice-President
Mr. Henry M. Whitesides, Secretary-Treasurer

Mr. James T. Comer, Gastonia, NC, 1986
Mr. C. Grier Beam, Cherryville, NC 1986
Mr. Henry H. Massey, Jr., Mount Holly, NC 1988
Mr. Plato P. Pearson, Jr., Gastonia, NC 1984
Mrs. Linda M. Roberts, Gastonia, NC 1984
Mr. Clyde H. Robinson, 1988
Mr. A. G. Thompson, Lincolnton, NC 1988
Mr. Henry M. Whitesides, Gastonia, NC 1988
Dr. Thomas A. Will, Dallas, NC 1986

Mailing Address and Telephone Number

GASTON COLLEGE
Highway 321 N.
Dallas, North Carolina 28034
(704) 922-3136

President's Policy Council

Dr. W. Wayne Scott, President

Dr. Jimmie W. Babb, Vice-President of Educational Programs and Instruction

Dr. Paul R. Berrier, Vice-President of Administrative Services and Development

Dr. Horace L. Cline, Vice-President of Student Services

Mrs. Joyce R. Paulin, Administrative Assistant to the President

Dr. J. Bruce Trammell, Vice-President of Finance and Administrative Services

Visiting Artist Program

The Visiting Artist Program is a cooperative grant program of the Department of Community Colleges, the North Carolina Arts Council, and Gaston College. It is a responsibility of the North Carolina Arts Council to recruit and screen artists of exceptional merit to become approved candidates. The artist is available without fee for lecture-demonstrations, performances and exhibitions, workshops, consultations and special projects in the Gastonia area. Gaston College's artist also participates in exchange performances and short term residencies with artists at other Community College institutions.

Programs are held for schools, civic groups, churches, businesses and industries, and other organizations. A typical performance may include a demonstration or performance, a slide-lecture presentation, a discussion, or question and answer session, to provide an understanding of the art experience.

Arrangements to schedule a program may be made in advance by contacting the artist at Gaston College.

Accreditations and Memberships

Gaston College is accredited by the Southern Association of Colleges and Schools.

Five engineering technology curricula are accredited by the Accreditation Board for Engineering and Technology, Inc. ABET is recognized by the National Commission of Accrediting as the appropriate accrediting agency for the accreditation of engineering technology curricula.

The Nursing programs are accredited by the North Carolina Board of Nursing.

The following organizations are among those in which the College holds institutional memberships:

- Accreditation Board for Engineering and Technology
- American Association of Collegiate Registrars and Admissions Officers
- American Society for Engineering Education
- Gaston County Chamber of Commerce
- National Association of Broadcasters
- National Association for Foreign Student Affairs
- North Carolina Association of Broadcasters
- North Carolina Industrial Developers Association
- Southern Association of Colleges and Schools
- Southern Association of Colleges and Junior Colleges

REGISTRATION AND RECORDS

Students may register several weeks before the start of each quarter's classes. Specific registration information is contained in instructions distributed before each quarter begins.

To insure an advantageous class schedule and to realize the full benefits of the College's orientation and counseling services, students are urged to begin the admission process at the beginning of the quarter preceding the one they wish to enter. High school students may apply in their senior year.

Course Overload

No student may carry in excess of twenty credit hours except with the written permission of the appropriate division dean.

Cost To Attend Gaston College

Gaston College, supported by the taxpayers of North Carolina and Gaston County, maintains modest instructional and general fees which are subject to change by the State of North Carolina and the Board of Trustees of Gaston College.

Curriculum Program—Instructional Fee Per Quarter Hour of Credit

North Carolina Residents	Out-of-State Residents
$3.25	$16.50

The maximum quarterly instructional fee for residents of North Carolina is $39.00 for 12 or more credit hours. The maximum quarterly instructional fee for out-of-state residents is $198.00 for 12 or more quarter hours.

Continuing Education Program—Registration Fee

There is an $8.00 or $15.00 registration fee per person per course (with certain exceptions). Continuing Education students pay no activity fee; however, they do pay the current parking fee.

OTHER GENERAL FEES

Student Activity Fee Per Quarter Hour of Credit

$1.00

The maximum quarterly student activity fee is $8,00 for 8 or more credit hours for in-state and out-of-state residents. Student Activity Fee is not charged for the Summer Quarter.

Some courses may require an additional supply fee. Courses requiring additional fees will be identified in the quarterly schedule.

Parking Fee

$4.00 per vehicle per year

Parking permits are valid September 1 through August 31

Graduation Fee

$15.00

American College Test

$9.50

The current cost is $9.50 for those students required to take the American College Test for guidance purposes, and is payable at the time the test is taken.

College Yearbook

The cost is established by the Student Government Association for those students who wish to purchase a yearbook.

Returned Checks

A fee of $5.00 will be assessed any student whose check is returned.

Right to Change Fees

All College fees are subject to change without notice.

Refunds

Curriculum Programs

A student shall not be allowed a tuition refund unless compelled to withdraw for unavoidable reasons. If a student partially withdraws before the first day of classes, a full tuition refund will be granted for those credit hours which were dropped. No student activity fee or parking fee will be refunded. If a student completely withdraws before the first day of classes, a complete refund of tuition, student activity fee, and parking fee will be granted. If a student withdraws within ten calendar days after the first day of classes, as published in the school calendar, the student will receive a 2/3 refund of tuition only if the refund is for more than $5.00. No student activity fee or parking fee will be refunded. No refunds will be considered following ten calendar days after the first day of classes. If a course fails to materialize, all the student's tuition will be refunded.

Continuing Education Programs

The registration fee for Continuing Education students will be refunded only in the event the class is cancelled.

Withdrawal

Withdrawal from a course for academic reasons must be initiated by a student prior to the end of the seventh week of the quarter. Withdrawal must be in writing on specific forms available in the Registrar's office.

An instructor may withdraw a student for excessive absence, unless arrangements satisfactory to the instructor can be made by the student for acceptable academic progress. An instructor may initiate a student withdrawal from the first day of the quarter through the last day of the seventh week of the quarter. **(NOTE: Students not attending classes for any reason should not expect the instructor to drop them. It is the student's responsibility to withdraw officially by completing a withdrawal form in the Registrar's office by the deadline date. Failure to do so could result in an F grade.)**

Students unable to complete an academic quarter for reasons totally beyond their control, such as an emergency medical condition, may petition in writing the designated campus administrative authority for permission to withdraw from class beyond the seventh week of the quarter.

Student Identification Card

Each student is required to have a Gaston College identification (ID) card. It is required for registration activities, for library checkout purposes and for admittance to athletic, cultural and social events. Currently enrolled students should carry their ID cards at all times and present them on request of College authorities at any time.

Each student will receive a Gaston College ID card as part of the registration procedure. The Gaston College ID card is non-transferable and is void unless it is signed by the student and validated for the current term.

Loss or theft of a Gaston College ID card should be reported within 24 hours to the Office of the Vice-President for Student Services. The cost for a replacement ID card is $1.00.

Residency Requirements

Gaston College is supported by the taxpayers of North Carolina and Gaston County. Students who are not state residents pay out-of-state fees. A student's

official residency status is determined at the time of registration according to the residency policy of the State of North Carolina, the North Carolina Department of Community Colleges, and the Gaston College Board of Trustees. A change of address does not automatically entitle a student to pay the same instructional fees as a North Carolina resident. Requests to change one's residency status should be submitted to the Admissions office. More information on residency requirements can be obtained from the Admissions office.

Insurance

Gaston College does not have insurance to cover students if they are injured on the Gaston College campus or in a college related activity. It is advisable, therefore, that students (especially those in areas which could be considered as potentially hazardous) make certain they have appropriate coverage under a personal accident policy or that of a parent's.

For those who find they do not have accident insurance coverage, information on a Blue Cross student plan is available from the Office of the Vice-President of Student Services, Room 3 of the Myers Center.

Change Of Address

A student should report a change of address on forms available in the Registrar's Office.

International Students

Gaston College will admit International Students who meet the special admissions requirements established for obtaining F-1 visa status and college requirements as established by the Gaston College Board of Trustees.

Admission of an international student to the College does not assure admission to a particular course and/or career program. Admission to a particular course and/or career program will be based upon criteria determined by the College. The number of international students admitted is related to the extent of special services that can be made available by the College.

As a part of the admissions procedure, international students are required to show proficiency in English. A special English examination may be required, but previous work at other educational institutions also will be taken into consideration. For more information, contact the Admissions office. Once admitted, the International Student must meet certain obligations to maintain F-1 Status. These obligations may be obtained in detail from the Foreign Student Advisor and the Admissions office.

Transfer To Gaston College From Another College

Students are eligible to transfer from accredited colleges and universities. Transfer students whose status with the institution last attended is other than "Good Standing" or whose accumulative grade point average is below the sliding scale used by Gaston College may be admitted only on probation. If the transfer student is not eligible to return to the institution from which he wishes to transfer, he may be refused admission to Gaston College.

Gaston College accepts transfer credits from institutions which have the accreditation of the North Carolina State Board of Education for colleges in North Carolina and the Southern Association of Colleges and Schools. Colleges and universities outside North Carolina must have accreditation from the appropriate regional accrediting agency for transfer to be accepted. Transcripts will

be evaluated by deans of the curricular divisions for transfer credit. The student should contact the Registrar's Office to determine which credits accepted in transfer will apply toward the degree sought. This procedure is initiated in the Admissions Office. Some departments at Gaston College require an examination to validate transfer credit. These examinations are administered by the department or division involved.

Advanced Placement

A student may be granted advanced standing by obtaining permission to take a placement examination from the respective department chairperson and the divisional dean. The department chairperson will notify the division dean and the Registrar of the student's course placement. Advanced placement reduces the credit hours a student must take to meet graduation requirements.

Students who plan to transfer to a four-year institution should be aware that the receiving four-year institution may require the courses in question. No student may request advanced placement for more than fifteen credit hours or after earning thirty-six hours of college credit. The grade Z is recorded for credit so granted.

Credit By Examination

At anytime during the period of enrollment in a given course at Gaston College, a student must petition the course instructor and department chairperson for permission to seek course credit by examination. If both grant their permission, the department chairperson, upon the student's successful completion of the examination, will notify the division dean and the Registrar of this outcome. Credit by examination can be permitted for courses numbered 100-299 and 1100-1199. No student may request credit by examination for more than eighteen credit hours. The student must present the instructor(s) conducting the examination with the permit for the examination and a receipt from the Business Office.

The grade of CE will be earned by successful completion of the credit by examination and entered in the student's record. Credits by examination will be applied toward graduation requirements. Quality points are not computed for the grade CE.

Veterans Information

Students may be eligible for educational benefits from the Veterans Administration (VA) while attending Gaston College. The VA has certified Gaston College as an institution qualified and equipped to provide education in the arts and sciences and in career program areas under the provisions of Chapters 31, 32, 34, or 35 of Title 38 of the U.S. Code.

To receive benefits, eligible students at Gaston College must meet admission criteria, maintain satisfactory academic progress toward an educational objective, and notify the Registrar's Office and the Veterans' Affairs Office of enrollment and any changes in enrollment. The Veterans' Affairs Office is responsible for keeping the Veterans' Administration informed concerning the educational status of eligible students. All questions and problems pertaining to certification or programs should be directed to the Veterans' Affairs Office.

A grade of "S" such as sometimes awarded in Developmental Studies courses may not be awarded to veterans or to veteran's dependents receiving VA educational benefits.

Vocational Rehabilitation

The State of North Carolina provides financial assistance for residents who have permanent handicaps. Information concerning such aid is available through the Director of Vocational Rehabilitation, State Department of Public Instruction, Raleigh, North Carolina 27600.

Course Auditing

Auditing a course means that a student attends classes, but is not required to submit assignments or take examinations. An auditor, therefore, receives neither a grade nor course credit. The auditing fee, however, is the same as when a student is regularly enrolled for credit. The decision to audit cannot be reversed.

Students should register for the course to be audited during the registration period, then complete an audit form, obtain the signature of the instructor and submit it to the Registrar's Office. Audit may be declared up through the seventh week of class. Currently enrolled Gaston College students are permitted to audit one or more courses.

Careful consideration is advisable before requesting permission to audit a course. Audit status is not convertible to credit status. When uncertain about whether to audit a course, students should see a counselor.

Full-Time/Part-Time Status

A student must take at least 12 quarter credits to be considered a full-time student. Although the normal course load for a full-time student is 16 quarter credits, a counselor or advisor may recommend a heavier or lighter load depending on ability and/or past performance. Permission from the division dean is necessary to enroll for more than 20 quarter credits. A part-time student is one registered for less than 12 quarter credits. When job requirements restrict the time available for attending classes, careful and realistic planning is necessary to successfully manage one's job and academic studies.

Each credit hour taken usually requires a minimum of two hours of outside study each week. A student employed full-time should not attempt to carry more than two courses per quarter. A student working part-time may carry a course load in proportion to the hours of employment.

Access To Student Records

Gaston College, as part of its responsibilities to students, must maintain accurate and confidential student records. The College recognizes the rights of students to have access to their educational records and to limit such access by others in accordance with existing College guidelines and The Family Educational Rights and Privacy Act, passed by the U.S. Congress in 1974. Student records, with certain exceptions, will not be released without prior consent of the student. Students have the right to review and question the content of their educational records within a reasonable time after making a request for such a review. If there are any questions as to the accuracy or appropriateness of the records that cannot be resolved informally, an opportunity for a hearing on the matter is provided. Students wishing to review their educational records may apply to the Registrar's Office for details regarding College policy and procedure designed to expedite their request.

Transfer Of Credits

Counselors and other members of the College staff will advise and assist any student planning to transfer to a four-year institution. They will help students prepare for and complete the transfer process.

It is the student's responsibility to select the institution and to follow the admissions requirements closely. These requirements are indicated in the particular institution's catalog. Reference copies of various catalogs are available in the campus library and counseling offices.

Because of the highly specialized nature of courses in career programs, many of the courses are not designed for transfer to a four-year institution. Students also should note that courses with numbers lower than 100 (the last three digits) usually do not transfer. See COURSE NUMBERING in this catalog.

Students are strongly advised to see a counselor regularly if they are planning to transfer to a four-year college or university. Representatives from four-year colleges often visit the campus to help Gaston College students plan their transfer programs.

Transcripts Of Grades

Information on a student's academic performance is available on a quarterly basis via direct grade mailings and transcript records.

Students may request official transcripts of grades earned at Gaston College through the Registrar's Office. Individual requests must bear the student's signature.

Students receive free transcripts upon request.

Cross Registration (Charlotte Area Educational Consortium)

In addition to the classes listed in the quarterly schedule, other classes not available at Gaston College are offered at the other ten consortium colleges. Information is available through the Registrar's Office.

ACADEMIC REGULATIONS

Gaston College has established a set of regulations, policies, and standards in order to provide an academic environment that will promote the educational outcomes of quality education and assured compliance with state, federal, accreditation, and certification directives and statutes.

Students are responsible for the proper completion of their academic programs based upon the requirements stated in the GASTON COLLEGE CATALOG in conjunction with the current BULLETIN. Faculty members, staff members, counselors, and administrators are available to help students with planning, academic, and other problems, but the responsibility rests upon the individual student.

Grounds For Student Dismissal

Academic standards and compliance with accreditation and legal requirements are maintained, in part, through regulations and policies related to student behavior both in and out of the classroom, i.e., matriculation for scholarly pursuit and citizenship. The College has the right to dismiss a student if in violation of regulations or policies.

A student may be dismissed from a course or a program under academic regulations or from the College for violations of citizenship regulations.

Dismissal from Gaston College for academic reasons is initiated by faculty, chairpersons, divisional deans, or the student's advisor upon petition to the Vice President of Educational Programs and Instruction.

Academic dismissal is based upon the concept of "Satisfactory Progress" in a specific course or program which is stated in terms of minimum grades, completion of course sequences, and the achievement of certain knowledges, skills, and abilities.

Reinstatement of a dismissed student is possible only through the auspices of the Vice-President of Educational Programs and Instruction. Note: Dismissal is to be distinguished from academic suspension. Academic suspension is a temporary sanction administered by the student's advisor or the department chairperson in terms of a "Satisfactory Progress" statement. That department chairperson establishes the conditions of the suspension, i.e., duration, remediation, proficiency demonstration. Appeal of a suspension is only to the Vice-President of Educational Programs and Instruction through the divisional deal of the respective division.

Dismissal From An Occupational Program

If the department chairperson determines that a student is not a safe and dependable practitioner in the lab, shop, clinic, or field area in the progress of a course, then the student may be dismissed from the program with the concurrence of the Vice-President of Educational Programs and Instruction through the due process procedure.

scribed in a one or two-year sequential pattern and are offered only once during the sequence, a student has no opportunity to repeat one of these courses or to elect a substitute course. Therefore, a student who fails one of these courses will be dismissed from the program at the end of the quarter in which the failure occurs.

Students dismissed from an occupational program under this policy may petition for enrollment in a later class.

Standards Of Honesty

The College is conducted on basis of common honesty. Dishonesty, cheating and plagiarism, or knowingly furnishing false information to the College are regarded by the College as particularly serious offenses. Within the respective curricular divisions of Gaston College, faculty members handle cases of dishonesty in their classes by levying certain penalties. However, in flagrant cases, the penalty may be dismissal from Gaston College by a ruling from the Gaston College Judiciary.

POLICIES AND PROCEDURES

Grading System

The quarter hour is defined as the unit of credit value of work involved in attending lectures for one class meeting a week for one quarter, or for laboratory session varying from two to three hours a week for one quarter.

Grade Symbols

Gaston College is on a quarter system. One unit of credit is equal to one class hour of lecture of class meeting a week, or for laboratory sessions varying from two to three hours a week for one quarter.

A final grade is the instructor's evaluation of the student's work and achievement throughout the course. Grades and marks are given at the discretion of the instructor and they may change grades and marks on forms provided by the Registrar's Office whenever errors occur.

Factors upon which the final grade may be based are attendance, recitation, written and oral quizzes, reports, papers, final examination, and other class activities. The evaluation will be expressed according to the following letter system:

Grades		**Quality Points**
A	Superior	4 per quarter hour
B	Above Average	3 per quarter hour
C	Average	2 per quarter hour
D	Lowest Passing Grade	1 per quarter hour
F	Failure	0 per quarter hour
CE	Credit by Examination Granted	0 per quarter hour
I	Incomplete	0 per quarter hour
W	Withdrawal	0 per quarter hour
AU	Audit	0 per quarter hour
X	No grade reported by instructor	0 per quarter hour
S	Satisfactory Progress	0 per quarter hour
CEU	Continuing Education Unit	0 per quarter hour

An average of C is defined as a grade-point average of 2.00 on all computed grades.

F Grade — The grade F is recorded if the student has failed on the combined evaluation of work through the quarter.

CE Grade — At anytime during the period of enrollment in a given course at Gaston College, a student must petition the course instructor and department chairperson for permission to seek course credit by examination. If both grant their permission, the department chairperson, upon the student's successful completion of the examination, will notify the division dean and the Registrar of this outcome. Credit by examination can be permitted for courses numbered 100-299 and 1100-1199. No student may request credit by examination for more than eighteen credit hours.

The student must present the instructor(s) conducting the examination with the permit for the examination and a receipt from the Business Office.

The grade of CE will be earned by successful completion of the credit by examination and entered in the student's record. Credits by examination will be applied toward graduation requirements. Quality points are not computed for the grade CE.

Z Grade — The Z grade is assigned to credits accepted in transfer by the appropriate curricular dean or other credits granted. The grade authorizes credit without further qualification of student performance. The Z grade does not affect a student's grade-point average in any way and is not used in determining whether a student qualifies to graduate with academic honors.

I Grade — The grade I is used to postpone course evaluation. It is to be given only when unusual circumstances, such as illness, prevent a student from

completing all the requirements of a course by the end of the regular term. An I must be removed from the student's record on or before the end of the eighth week of the quarter the student will be evaluated. The grade I is not computed into the gradepoint average until the course requirements are met to the instructor's satisfaction.

W Mark — A student who wishes to withdraw from a course, or courses, within the first seven weeks of the quarter may do so without the credit hours being computed as hours attempted.

Withdrawal from a course or courses after the first seven weeks for other than an appropriate cause determined by medical, counseling, or administrative circumstances shall be counted as a grade earned and computed in the gradepoint average.

The mark W indicates the student withdrew from the course within the first seven weeks or at a later date for appropriate cause determined by medical, counseling, or administrative circumstances.

A student wishing to withdraw from a course or courses must follow the official procedure which is initiated in the Registrar's Office.

AU Mark — Students who wish to audit courses must follow the regular registration procedures and declare the audit status to the respective course instructor. A student who registers for an audit may not receive a grade for the course. The fees are the same as for regular college credit.

S Mark — S indicates satisfactory progress toward the completion of course work involving individually guided study, internships, externships, and independent study. When the work has been concluded, the S is changed to a regular letter grade and computed accordingly.

U Mark — U indicates unsatisfactory progress toward the completion of course work involving individually guided study, internships, externships, and independent study. When the work has been concluded, the U is changed to a regular letter grade and computed accordingly.

CEU Grade — The CEU is given for ten contact hours of participation in an organized continuing education adult or extension experience under responsible sponsorship, capable direction and qualified instruction.

Progress Policy

Satisfactory academic progress is determined by examining the ratio of quality points to quarter hours attempted. Quality point averages are computed by dividing the total number of quality points earned by the total number of quarter hours attempted. Since a quality point average of 2.00 on all courses presented is required for graduation, students should endeavor at all times to have at least twice as many quality points as quarter hours attempted.

The S (progress grade allows a student in an individualized instruction course, who has attended regularly and made satisfactory progress, to continue the course in a subsequent quarter until all the course requirements are met. The student must re-register for the course in the subsequent quarter. The hours credit and hours attempted will not be given until the first quarter the student enrolls in an individualized course. Exceptions to continue the "S" into a third quarter must have the written permission of the instructor and the division dean.

A grade of "S" may not be awarded to veterans nor to veteran's dependents receiving VA educational benefits.

Probation

Students must maintain at least a 1.00 quality point average on the first 18 quarter hours attempted. Any student who maintains less than a 1.00 grade-point average on the first 18 quarter hours attempted is placed on academic probation.

Satisfactory academic progress is determined by examining the ratio of quality points to quarter hours attempted. Quality point averages are computed by dividing the total number of quality points earned by the total number of quarter hours attempted. Since a quality point average of 2.00 on all courses presented is required for graduation, students should endeavor at all times to have at least twice as many quality points as quarter hours attempted.

After the first 18 credit hours attempted, a student must earn a quarterly grade-point average of at least 2.0 or be placed on academic probation.

Students on academic probation may not register until they have seen a counsellor and/or department chairperson, discussed reasons why they are on probation and developed a plan to remove themselves from probation. Students must have their credit hours and courses approved, as signified by the counselor's signature and/or the department chairperson's signature on their course selection form.

Suspension

Students enrolled in programs of less than six quarters in length must meet the following scale:

Credit Hours	Grade-Point Average below which student enters the Suspension Status
1-18	No Requirement
19-36	1.45
37-54	1.90
55 or more	2.00

Students enrolled in programs of six or more quarters in length must meet the following scale:

Credit Hours	Grade-Point Average below which student enters the Suspension Status
1-18	No Requirement
19-36	1.50
37-54	1.75
55-72	1.90
73 or more	2.00

Students who do not meet these minimum requirements will be placed on academic suspension.

Before reentry, a student on suspension must meet with hid department chairperson to discuss reasons for the suspension. A plan for removal from suspension will be developed. This plan could be a change of program. After a satisfactory plan is developed the chairperson will sign the student's Course Selection Form allowing him to register. It will be the responsibility of the student to meet with the department chairperson at the mid-point of the quearter to discuss progress being made on the plan. Before the suspended student may register for the next quarter, he must obtain the signature of the department chairperson.

Change Of Program

Students may change their program by discussing their plans with a counselor who will help initiate the procedure. The division dean for the new program will be asked to evaluate the student's transcript. Following the evaluation, the student's permanent record will indicate a change of program. Only the Gaston College grades accepted through the dean's evaluation will be considered in computing the Gaston College grade-point average for the new program.

Following approval, the student's permanent record will indicate a change of degree objective. All grades for all courses taken prior to this change will not be considered in computing the Gaston College grade-point average. Students will therefore, be admitted to the new program in good standing. Credits successfully earned prior to the change will, of course, be applied toward the new program.

NOTE: Students planning to transfer to another college or university are cautioned that the receiving institution may use all grades earned in computing grade-point averages for admission or other purposes.

Student Classification

Evening: A student who is enrolled for a majority of course work scheduled after 4:30 p.m.

Day: A student who is enrolled for a majority of course work scheduled before 4:30 p.m.

Full-time: A student who is enrolled for twelve or more quarter hours.

Part-time: A student who is enrolled for fewer than twelve quarter hours.

Freshman: A student who has completed fewer than forty-two quarter hours of course work.

Sophomore: A student who has completed forty-two or more quarter hours of course work.

Only course work taken at Gaston College is used in computing grade-point averages and class standing.

Honor Lists

President's Honor List: This is a quarterly honor roll for students attaining a grade-point average of 4.00 on twelve or more hours of work (not including CE or Z credits) in any given quarter and with no withdrawals and/or incompletes being recorded.

Dean's List: In order to honor outstanding scholarship, the deans of the various programs will publish a Dean's List after each regular term. In order to qualify for a Dean's List, a student must take a minimum course load of not fewer than twelve quarter hours (not including CE or Z credit), and maintain at least a 3.50 average with no grade lower than a B and with no withdrawals or incompletes being recorded.

Repeating A Course

If two or more final grades (not including the W mark) are recorded for the same course, only the highest grade will be computed or applied toward a degree or diploma. (Exception: certain courses can be duplicated. See Description of Courses.) NOTE: This is an academic forgiveness policy.

Class Attendance

The instructional work of the College is designed for class attendance. The responsibility for class attendance is placed specifically on the individual student. At the beginning of each course it is the responsibility of each instructor to notify classes in writing of the attendance requirements to which the students must adhere.

The College reserves the right to sever its relationship with any student who fails to maintain the respective attendance requirements. Such a student can be dismissed from a given class upon recommendation of the instructor.

The student is responsible for all material covered in each course for which he is registered. In no instance does absence from class relieve the student from the responsibility for the performance of any part of the course work. The student is further responsible for initiating any request to make up work because of class absence. The decision to assist the student with makeup work, including tests, in every case rests with the instructor. The instructor may require verification of medical or personal circumstances presented by the student to influence this decision. Course work, not made up, may cost a student grade advantage in the final evaluation since the instructor is not required to offer the student an opportunity to make up course work.

A student may seek reinstatement into a class by submitting a written request to the respective instructor. If the request is denied, the student can petition for reinstatement directly to the Vice-President of Educational Programs and Instruction, who will make a final ruling upon the petition.

Graduation

Requirements for the degree or diploma certificate will vary according to the curriculum. Students should refer to the required courses in the catalog which apply to their particular program.

At least thirty (30) credit hours for an associate degree or diploma must be completed in attendance at Gaston College.

Graduation Procedures

Students are expected to file graduation applications with the Registrar's Office at least one quarter preceeding the completion of degree requirements. Commencement exercises to award degrees, diplomas, and certificates to students in respective divisions are at the conclusion of the Spring and Summer quarters. A graduation fee of $15.00 is charged to each graduating student. The specific date of the commencement exercise is listed in the College Calendar in front of this catalog.

Graduation Marshals

The rising sophomores who have attempted 36-50 credit hours at Gaston College, and who have maintained the highest scholastic averages during their freshman year, are honored by being named Graduation Marshals. The marshal who has earned the highest academic record is designated Chief Marshal.

Graduation With Honors

Gaston College recognizes excellent scholarship by designing the status of HONOR or HIGH HONOR to selected graduates receiving associate degrees or diplomas. To be eligible for graduation with HONOR, a student must have a grade-point average of 3.50 or above but below 3.80 on all work presented for graduation.

To be eligible for graduation with HIGH HONOR, a student must have a grade-point average of 3.80 or above on all work presented for graduation.

The awarding of HONORS to a student must be recommended by the program sponsoring faculty.

STUDENT SERVICES

Counseling

Gaston College provides professional guidance and counseling services. After completing admission requirements, each student will be given an appointment with a member of the counseling staff.

Upon admission to the College, students should attend an orientation session and schedule a conference with a counselor to discuss previous educational background, interests, aptitudes and goals. The counselors offer assistance in choosing an appropriate program of studies from the variety of courses offered. Thereafter, it is recommended that students meet with a counselor on a regular basis to review plans and progress.

Counselors can assist students who wish to clarify their educational or career goals through individual and group counseling, career development courses, and reference to available career resource materials in the campus libraries. In addition to academic advising, counselors can assist students with problems of a personal nature which may be affecting academic performance.

Student-Faculty Conference

The faculty members in Gaston College maintain scheduled office hours to confer with students regarding class work and related matters. Schedules of office hours will be found in the faculty office areas. Students are urged to familiarize themselves with the schedules and to contact their instructors during those hours.

Career Planning And Placement Services

The Career Planning and Placement Services at Gaston College operates as focal points for students and alumni/ae who are exploring careers or seeking employment. Career counseling and advising services assist students in exploring career options and in seeking, obtaining, and retaining employment.

Placement services assist students and former students by making them aware of the full range of career opportunities available, helping them present themselves effectively as candidates, and aiding them in finding part-time, temporary and summer employment.

CAREER PLACEMENT SERVICE: This service is available to all prospective graduates and alumni/ae of the College. Prospective graduates interested in utilizing the Career Placement Service should register at least two quarters prior to graduation to establish their credential files.

Library

The library at Gaston College is maintained for the benefit of students and faculty members. Supplemental materials are part of the collection, which is assembled through the cooperative efforts of the faculty and library staff.

The library maintains open stacks to allow direct access to books, periodicals and other materials.

Other facilities include playback equipment for audio tapes and other recordings, microfilm readers, photographic devices for reproducing printed matter, video cassette viewing equipment and carrels for individual study.

Housing

Gaston College is a commuter institution primarily designed to serve residents of Gaston County and, therefore, does not provide housing for its students.

The Book Store

The Book Store is located in the Myers Center to serve students, faculty and staff by providing required textbooks and supplies. In addition, they carry a selection of nonrequired books and incidental items.

GASTON COLLEGE BOOKSTORE REFUND POLICY

All textbook sales are final, however, the following exceptions will be made:

1. If you drop a class for which the textbook was purchased, a full refund will be given only during the first ten days of each quarter. The new books must have no names and marks in them and they must be accompanied by the cash register receipt, plus your "Add and Drop" slip.
   Publishers have policies to which we must adhere regarding the amount of time we have to return books. Our format is focused on these policies.
2. Keep your sales slip! We require a drop slip and sales receipt to protect you, the customer, and ourselves. These requirements are necessary to help eliminate refunds on books which the student never purchased.
3. All sales of workbooks, study aids, lab manuals, consumable books and key notes are final.
4. Any defective book will be replaced free of charge. Please return it as soon as possible.

Student Activities

Gaston College recognizes the educational, recreational and social values of a well-integrated program of student activities. It believes that student participation in co-curricular activities contributes to the total development of the individual and to the growth of leadership ability. The college provides a well-balanced program developed in response to student requests and needs.

A large measure of responsibility for campus affairs is in the hands of the students advised by the Vice-President of Student Services and faculty members. The students essentially plan and present many co-curricular campus activities. They determine social programs and participate in the maintenance of the discipline essential to an academic community. Activities may vary from quarter to quarter depending upon student choice.

Every student is welcome to participate in a wide variety of activities ranging from involvement in the College and campus governance systems, to fine arts and entertainment programming, to membership in student clubs.

Governance participation may include membership on numerous College and campus committees including, but not limited to, College committees on Curriculum, Degree Requirements and Academic Calendar, Affirmative Action and campus Grievance committees.

Programming participation includes membership on committees that select and plan film, lecture, drama, entertainment and various recreational, leisure-time and educational programs.

Clubs and organizations covering a wide spectrum of interests exist to meet the needs of small groups of students. Further information may be obtained from the Office of Vice-President of Student Services.

Among the many activities and organizations to be found on the Gaston College campus each quarter are:

- Bands
- Choirs
- Concerts
- Dances and other social functions
- Drama
- Interclub councils
- Interest groups
- Intramural-extramural sports
  (including archery, badminton, basketball, bowling, flag football, golf, pool, softball, jogging, swimming, table tennis, tennis, track, and volleyball)
- Fine Arts
- Newspapers
- Political clubs
- Professional organizations
- Programming boards
- Religious groups
- Student Government Associations

Alumni Association

Gaston College has an active Alumni Affairs Committee which consists of members of the faculty and staff. College alumni work with the Alumni Affairs Committee in planning and coordinating alumni activities. Alumni are involved in social activities and sponsor special projects for the improvement of the College. An alumni office has been established on the campus.

PRESIDENT'S POLICY COUNCIL

Scott, W. Wayne 1981
President
B.S., University of Chattanooga
M.A., College of William & Mary
Ph.D., Ohio State University

Babb, Jimmie W. 1965
Vice-President of Educational Programs and Instruction
A.B., Lenoir-Rhyne College
M.A., Appalachian State University
Ed.D., N.C. State University

Berrier, Paul R. 1974
Vice-President of Administrative Services and Development
A.B., M.Div., Duke University
Ed.S., Appalachian State University
Ed.D., University of N.C. at Greensboro

Cline, Horace L. 1965
Vice-President of Student Services
B.S., East Carolina University
M.A., Appalachian State University
Ed.D., Nova University

Paulin, Joyce R. 1964
Administrative Assistant
Gaston College

Trammell, J. Bruce 1964
Vice-President of Finance and Administration
B.S., M.A., Appalachian State University
Ed.D., Nova University

COUNCIL OF INSTRUCTIONAL DEANS

Ball, Roland R. 1965
Dean of Trade & Industrial Programs
B.S., Berry College
M.A., Appalachian State University

Huntley, Troy C. 1973
Dean of Health & Public Service Programs
B.S., M.A., Western Carolina University
Ed.D., East Texas State University

Keck, Russell A. 1965
Dean of Engineering & Related Technologies
B.S.I.E., Virginia Polytechnic Institute

Merritt, John C. 1965
Dean of Continuing Education and Community Service Programs
B.S., M.A., East Carolina University
Ed.D., N.C. State University

Sellers, LeRoy 1979
Dean of Business & Computer Sciences Programs
B.S., High Point College
M.Ed., University of North Carolina at Charlotte
Ed.S., Appalachian State University

Small, Hazel C. 1980
Dean of Developmental Education Programs
B.S., M.A., University of Michigan
Ed.D., N.C. State University

Stewart, Margaret C. 1969
Dean of Liberal Arts & Sciences
B.S., Pfeiffer College
M.S., Appalachian State University
Ph.D., Georgia State University

FACULTY

Armstrong, J. Leonard, Jr. 1965
Department Chairperson, Electronics Engineering Technology
B.S.E.E., N.C. State University

Ball, George A. 1966
Department Chairperson, Science
B.S., Ohio State University
M.S., Florida State University
M.Agr., N.C. State University

Baucom-Grimes, Willie M. 1982
Visiting Artist
B.A., University of North Carolina at Charlotte
M.F.A., University of North Carolina at Greensboro

Berry, Benedict R. 1976
Instructor, Philosophy
A.B., St. Benedict's College
Ph.L., Laval University

Blanton, Robert A. 1969
Department Chairperson, Social Science
B.S., M.A., Appalachian State Univer.

Bostian, Steven W. 1971
Department Chairperson, Business Administration
B.S.B.A., M.A., Appalachian State Univ.

Bradley, Lois B. (R.N.) 1981
Instructor, Nursing
B.S.N., Lenoir-Rhyne
M.Ed., Univ. of N.C. at Charlotte

Brenner, R. John 1976
Instructor, Social Science
B.S., M.A., University of Illinois

Cameron, Edgar M. 1976
Instructor, T & I Related Courses
A.A.S., Gaston College

Cameron, Fairley, M. 1968
Department Chairperson, Machinist
University of Tennessee

Campbell, J. David 1982
Instructor, Broadcasting/Radio/TV
Carolina School of Broadcasting
Catawba Valley Tech College

Carpenter, Brenda L. 1973
Instructor, Business
B.S., M.S., Winthrop College

Cline, Henry C. 1965
Instructor, Physics
B.S., M.A., Appalachian State University

Cole, Judith P. 1970
Instructor, Biology
B.S., Morris Harvey College
M.S., Marshall University

Cozart, Norma L. (R.N.) 1982
Director of Nursing
B.S.N., Duke University
M.A., Appalachian State University

Crawford, Richard N. 1965
Instructor, Drafting
A.A.S., Gaston Technical Institute
B.E.T., Univ. of N.C. at Charlotte

Davis, Claude 1964
Instructor, English
A.B., Elon College
M.Ed., Univ. of N.C. at Chapel Hill

Davis, Kenneth C. 1969
Instructor, French and Spanish
B.A., M.A., Appalachian State University

Domenico, Elizabeth W. 1971
Instructor, Busines
B.S., Rider College
M.S., Temple University

Duarte, Gwendolyn N. 1965
Instructor, Business
B.S., Winthrop College
M.A., Furman University

Dunsmore, Stuart G. 1971
Instructor, Public Speaking & Dance
B.S., Butler University
M.A., New York University

Fahringer, Ray M. 1982
Instructor, Mechanical & Production Engineering Technology
B.S.M.E., Bucknell University

Farrell, William J. 1968
Instructor, Biology
B.S., Manhattan College
M.S., Texas A & M University

Freeman, Gary W. 1982
Instructor, Art
B.S., M.A., East Carolina University

Fulton, Jane K. (R.N.) 1982
Instructor, Nursing
B.S.N., Univ. of N.C. at Chapel Hill

Galant, Lawrence L. 1970
Instructor, Psychology
B.S., Fairleigh Dickinson University
M.Ed., Pennsylvania State University
Ph.D., Univ. of N.C. at Greensboro

George, Dianne S. (R.N.) 1982
Instructor, Nursing
B.S.N., Univ. of N.C. at Charlotte

Goines, Barbara C. (R.N.) 1975
Instructor, Nursing
B.S., Winston-Salem State University

Goldman, Saul S. 1976
Instructor, Criminal Justice
B.L., M.L., Brooklyn Law School

Hambright, Myers T. 1974
Instructor, Electronics Engr. Technology
B.A., Elon College
M.B.A., Winthrop College

Harrison, Barbara G. (R.N.) 1975
Instructor, Nursing
B.S., Winston-Salem State University
M.Ed., Univ. of N.C. at Charlotte

Hartung, A. Bruce 1964
Department Chairperson, Mathematics
A.B., Catawba College
M.Ed., Ed.D., Duke University

Hegenbart, Alex F. 1979
Department Chairperson, Music
B.A., S.M.H. at Amsterdam
M.M., Amsterdam Conservatory of Music

Hinkle, Jeffrey D. 1980
Instructor, Computer Science
B.T., Appalachian State University

Jackson, Jean C. (R.N.) 1978
Instructor, Nursing
B.S.N., Univ. of N.C. at Chapel Hill

Johnson, Dianne C. 1971
Department Chairperson, Secretarial Science
B.S.B.A., East Carolina University
M.Ed., Univ. of N.C. at Greensboro

Johnston, Janet L. 1974
Program Director, Early Childhood Education
B.S., Athens College
M.A., Ed.D., University of Alabama

Jones, Jo Ann S. 1979
Instructor, Business
B.S., MacMurray College
M.S., East Carolina University

Jones, Mary Elizabeth (R.N.) 1978
Department Chairperson, Medical Office Assistant
B.S., University of South Carolina
M.A., Central Michigan University

Killian, Don R. 1965
Program Director, Social Services
A.B., Davidson College
M.A., Appalachian State University

Kluttz, Mary G. 1982
Instructor, Computer Science
A.B., Lenoir-Rhyne College

Lackey, Keith F. 1982
Instructor, Civil Engineering Tech.
B.S., North Carolina State University

Lambert, D. Keith 1974
Department Chairperson, Art
B.S., East Carolina University
M.F.A., Univ. of N.C. at Greensboro

Lawrence, Donald L. 1981
Department Chairperson, Criminal Justice
B.S., Univ. of N.C. at Charlotte
M.S., University of S.C.

Leong, Vincent W.S. 1965
Instructor, Mathematics
A.B., High Point College
M.A., Appalachian State College

Lewandowski, Joseph T. 1974
Department Chairperson, Education & Psychology
A.B., M.A., Fresno State College
Ph.D., Washington State University

Logan, F. Thomas 1973
Instructor, Air Conditioning & Refrigeration
Gaston College

Lunsford, Paul C. 1965
Department Chairperson, Basic Studies
B.S., M.A., Appalachian State University

Manikas, William T. 1974
Instructor, Social Service
B.A., Boston University
M.A., Colgate University
Ed.D., Florida Atlantic University

McAteer, Porter L. 1965
Instructor, Industrial Engineering Tech.
B.S.I.E., North Carolina State University

McCrory, Nellie R. 1972
Instructor, English
B.S., M.Ed., Livingston University
Ph.D., University of Alabama

McDermott, John K. 1978
Instructor, Mechanical & Production Engineering Technology
B.S.M.E., University of Pittsburgh

McDuffie, Ernest B. 1969
Instructor, Reading
B.S., Elizabeth City State College
M.A., North Carolina Central University

Miller, Robert A. 1970
Department Chairperson, Computer Science
B.S., Trinity University
M.S., Stanford University

Mitchell, Joseph C. 1966
Department Chairperson, Automotive and Diesel Mechanics
General Motors Trade School
Mid-West Motive Trade Institute

Newman, Gene L. 1974
Instructor, Physical Education & Recreation
B.S., M.A., University of Florida

Onafowora, Laura L. 1982
Instructor, Business
B.A., Rutgers University
M.P.A., New York University

Phillips, L. Sam 1966
Department Chairperson, Languages & Literature
A.B., Erskine College
M.A., Appalachian State University

Quick, Kenneth G. 1976
Department Chairperson, Broadcasting/Radio/TV
B.A., Belmont Abbey College

Ramsey, Lee, S. 1976
Instructor, Business
B.S.B.A., M.A., Appalachian State Univ.

Reavis, Lester J. 1966
Instructor, Mathematics
B.S., North Carolina State University
M.A., Appalachian State University

Richardson, Jesse V. 1966
Department Chairperson, Welding
Belmont Abbey College

Roberson, Kathryn W. 1972
Instructor, English
B.A., M.A., Univ. of N.C. at Charlotte

Robertson, James G. 1974
Program Director, Transportation
B.S., M.S., Pennsylvania State University

Rogers, James M. 1976
Department Chairperson, General Studies
B.A., North Carolina Central University
M.A., Appalachian State University

Runyon, Harry T. 1971
Instructor, Automotive Mechanics
Nashville Auto Diesel College
Mayo State Vocational School

Russell, Donald K. 1965
Department Chairperson, Electronics Servicing/Industrial Electronics
A.A.S., Gaston College

Sellers, Patricia W. 1975
Instructor, Chemistry
B.S., M.A., Univ. of N.C. at Chapel Hill

Sigmon, Jimmie L.
Department Chairperson, Electrical Installation & Maintenance
A.A.S., Gaston College

Simpson, Gary 1976
Instructor, Physical Education & Recreation
B.S., Appalachian State University
M.A.T., Univ. of N.C. at Chapel Hill
Ed.D., Nova University

Sizemore, Leslie K. 1981
Instructor, Computer Science
A.A., Gaston College
B.S., East Tennessee State Univ.

Smith, Paul S. 1971
Instructor, English
A.B., Lenoir-Rhyne College
M.A., Ed.S., George Peabody College

Smith, Reginald M. 1980
Instructor, Air Conditioning & Refrigeration
A.A.S., Gaston College
B.A., Sacred Heart College

Stokes, Mamie B. 1975
Department Chairperson, Marketing
B.S., Florida A & M University
M.B.A., Indiana University

Stroup, Joyce E. 1978
Instructor, General Studies
A.A., Gaston College
B.A., M.Ed., Univ. of N.C. at Charlotte

Suddreth, M. Camilla 1972
Instructor, Biology
B.A., M.A., Appalachian State University

Topp, John B. (P.E.) 1966
Department Chairperson, Civil Engineering Tech.
B.Sc.F., University of New Brunswick
M.Ed., Univ. of N.C. at Charlotte

Turner, Patsy W. 1982
Instructor, Business
B.S., B.S.B.A., Gardner-Webb College

Wash, Allen G. 1977
Department Chairperson, Accounting
B.B.A., Augusta College
M.B.A., M.Acc., Univ. of South Carolina
CPA

Whippo, Paul D. 1970
Instructor, Geography
B.S., Indiana State University
M.A., Indiana University

Whisenant, David H. 1980
Instructor, Business
B.S., M.A., Ed.S., Appalachian State Univ.

Whitley, Roger W. 1979
Coordinator, Criminal Justice Academy
B.S., Mars Hill College

Williams, Betty L. (R.N.) 1979
Instructor, Nursing
B.S.N., Indiana State University
B.S., Case Western Reserve University

Williams, Robert L. 1967
Instructor, English
Writer-in-Residence
B.A., Lenoir-Rhyne College
M.A., Appalachian State University

Winstead, Susan H. (R.M.) 1382
Instructor, Nursing
B.S.N., Univ. of N.C. at Chapel Hill
M.S.N., Univ. of N.C. at Greensboro

Wood, Bobby G. 1975
Instructor, Welding
Catawba Valley Technical Institute
Gaston College

Wright, James C. 1972
Instructor, Computer Science
A.B., Lenoir-Rhyne College
M.S., Madison College

INSTRUCTIONAL & STUDENT DEVELOPMENT

Baker, Barbara A. 1974
Librarian
B.A., University of N.C. at Asheville
M.S.L.S., Univ. of N.C. at Chapel Hill

Bambach, William J. 1976
Instructor, G.E.D.
B.A., Belmont Abbey College
M.A., Univ. of N.C. at Chapel Hill

Bennett, Thomas S. 1975
Counselor/Careers
B.S., Appalachian State University
M.Ed., Univ. of N.C. at Charlotte

Brown, Pearlie M. 1966
Librarian
B.S., M.L.S., N.C. Central University
Ed.D., Nova University

Carter, Helen L. 1970
Director, Counseling and Career Center
A.B., Atlantic Christian College
M.Ed., Ph.D., Univ. of N.C. at Chapel Hill

Chaffin, Troy F. 1974
Director, Academic Extension
B.A., University of Florida

Cole, Richard M. 1978
Audio-Visual Specialist
B.S., M.A., Appalachian State Univ.

Dale, Joyce B. 1980
Human Resources Development
Gaston College

Hagen, Milton M. 1965
Director, Community Service Programs
B.S., University of North Dakota
M.S., Indiana University
M.Ed., Ed.D., N.C. State University

Heywood, Caroline P. 1965
Coordinator, Learning Lab
A.B., Furman University
M.A., The American University

Hunsucker, David L. 1968
Director, Library and Media Center
A.B., Lenoir-Rhyne College
M.A., Appalachian State University
M.S.L.S., Univ. of N.C. at Chapel Hill

James, John T. 1974
Counselor/Disadvantaged/Handicappted/Testing
B.S.I.E., S.C. State College
M.Ed., University of N.C. at Charlotte

Jimison, Louise N. 1982
Supervisor, Child Care Training Center
B.A., Sacred Heart College

Johnson, David C. 1975
Director, Evening Programs
B.S., Winston-Salem State University
M.A., New York University
Ph.D., Miami University

Jones, Dean H. 1972
Registrar, Director of Admissions, Financial Aid, Veterans Affairs
A.B., University of Georgia
M.Div., Southeastern Seminary
M.A., Appalachian State University
Ed.D., Nova University

Kincaid, Brenda A. 1974
Placement
A.A., Gaston College

Massey, Nancy W. 1977
Instructor, A.B.E.
B.A., Furman University

Nichols, Sharon M. 1979
Instructor, H.R.D.
B.A., Univ. of N.C. at Charlotte

Pasour, Cathy C.
Instructor, H.R.D.
B.A., Univ. of N.C. at Charlotte

Perry, Dennis F. 1970
Director, Business & Industry Programs
B.S., M.A., Appalachian State Univ.
Ed.D., Nova University

Pitts, Laura A. 1979
Counselor/Retention
B.A., M.Ed., Univ. of N.C. at Greensboro

Richard, Wayne E. 1976
Coordinator, Learning Lab
A.B., Univ. of N.C. at Chapel Hill

Setzer, Charles W. 1964
Recruitment Specialist
A.A., Gaston College

Thornburg, L. Steve 1979
Director, Lincoln County Campus
B.A., M.P.A., Univ. of N.C. at Chapel Hill

Weaver, Paulette H. 1978
Instructor, Learning Lab
A.A., Gaston College
B.A., Sacred Heart Coliege

Yates, Judy W. 1980
Counselor/Advisement
A.A., Gaston College
B.A., Sacred Heart College
M.Ed., Univ. of N.C. at Charlotte

SUPPORT STAFF

Alexander, Norma F. 1964
Personnel Specialist
A.A., Gaston College

Armstrong, Ruby C. 1974
Custodian

Auten, Lois G. 1977
Cashier

Blanton, Rhonda V. 1980
Computer Programmer
A.A.S., Gaston College

Brandon, Teresia F. 1974
Registration and Records
A.A.S., Gaston College

Calhoun, Doy R. 1977
Cook

Carpenter, Betty K. 1969
Registration and Records Supervisor

Cauble, June F. 1979
Clerk Typist
A.A., Gaston College

Cogdell, Lucille F. 1962
Secretary
A.A., Gaston College

Cooke, Linda H. 1979
Secretary

Crowther, Joann Y. 1980
Registration and Records

Cruse, Mary J. 1971
Business Office Supervisor
B.A., Univ. of N.C. at Charlotte

Dee, Eugene L. 1977
Cook

Dixon, Alice A. 1978
Admissions

Elliott, Janet H. 1982
Custodian

Ellis, David B. 1982
Computer Programmer
A.A.S., Gaston College

Fortenberry, Flint T. 1979
Maintenance

Garrett, Vivian H. 1978
Child Care Center

Goodson, M. Dorothy 1982
Cook/Cashier

Goodson, Harry L. 1974
Maintenance

Gordon, Donald W. 1982
Custodian

Green, Geraldine B. 1979
Secretary

Greenlee, Linda M. 1967
Secretary
A.A., Gaston College

Gribble, Sara C. 1975
PBX/Receptionist

Heffner, David B. 1981
Custodian

Henry, Evelyn K. 1976
Financial Aid

High, Frances W. 1980
PBX/Receptionist

Holmes, Linda C. 1964
Supervisor Purchasing and Inventory

Hoyle, Sandra F. 1972
Secretary

Jarrett, James R. 1980
Custodian

Jones, Betsy H. 1979
Computer Programmer
A.A.S., Gaston College

King, Bonita G. 1976
LMC Technician
A.A.S., Caldwell Community College

Koone, Kandy P. 1980
Secretary
A.A.S., Gaston College

Leggette, Med D. 1982
Custodian

Littlejohn, Paul D. 1982
Custodian

Lowery, Hilda C. 1974
Secretary

Lynch, Lucinda F. 1978
Data Manager

Martin, Ann C. 1968
Bookstore Manager

Martin, Robyn R. 1977
Admissions
A.A.S., Gaston College

McCarter, Nancy E. 1979
Secretary
A.A., Gaston College

McElveen, Sharon L. 1975
Accounting Clerk

McGee, Thomas R. 1979
Security

McGill, Daisy S. 1974
Accounting Clerk

Meadows, Darlene K. 1982
CETA Clerk
B.A., J.C. Smith University

Miller, Frances E. 1972
Secretary

Miller, Jane K. 1973
Bookstore Assistant

Mintz, Annette W. 1978
Accounting Clerk

Montgomery, Cora H. 1979
Financial Aid
A.A.S., Gaston College

Navey, Linda H. 1972
Secretary

Parker, D. Dolores 1967
Secretary
A.F.A., Gaston College
B.F.A., Winthrop College

Patterson, Nancy C. 1982
Secretary
A.S., Kings College

Patterson, Robert W. 1982
Painter/Maintenance

Pearson, Geraldine T. 1973
Public Information Specialist
A.A., Gardner-Webb College

Perkins, Joanne P. 1979
Accounting Clerk

Petty, James W. 1970
Custodian

Putnam, A. Joanna 1982
Secretary

Rankin, Bobby S. 1977
Security
A.A., Gaston College

Robinson, Billy L. 1977
Shipping & Receiving

Rudisell, Nellie M. 1972
Custodian

Sahms, Patricia M. 1980
Printing Technician

Sanders, Sarah H. 1974
Custodian

Schultz, F. Jeanelle 1965
Bookkeeper

Scott, Katherine L. 1974
Veterans Affairs

Scott, R. Jerry 1972
Maintenance Supervisor

Scott, Samuel E. 1971
Director of Plant Operations

Smith, Cheryl N. 1980
Child Care Center
A.A.S., Gaston College

Smith, Loretta L. 1980
Child Care Center

Stackston, Hattie L. 1980
Child Care Center
A.A.S., Gaston College

Wade, Jeanell 1980
Child Care Center
A.A.S., Gaston College

Walker, Itelia B. 1966
Custodian

Walters, Jimmy W. 1975
Maintenance

Walters, Tony J. 1981
Maintenance

Williams, Ervin D. 1981
Maintenance

Williams, Freddie L. 1980
Security
A.A.S., Gaston College

Woody, Dorothy G. 1965
Purchasing Technician

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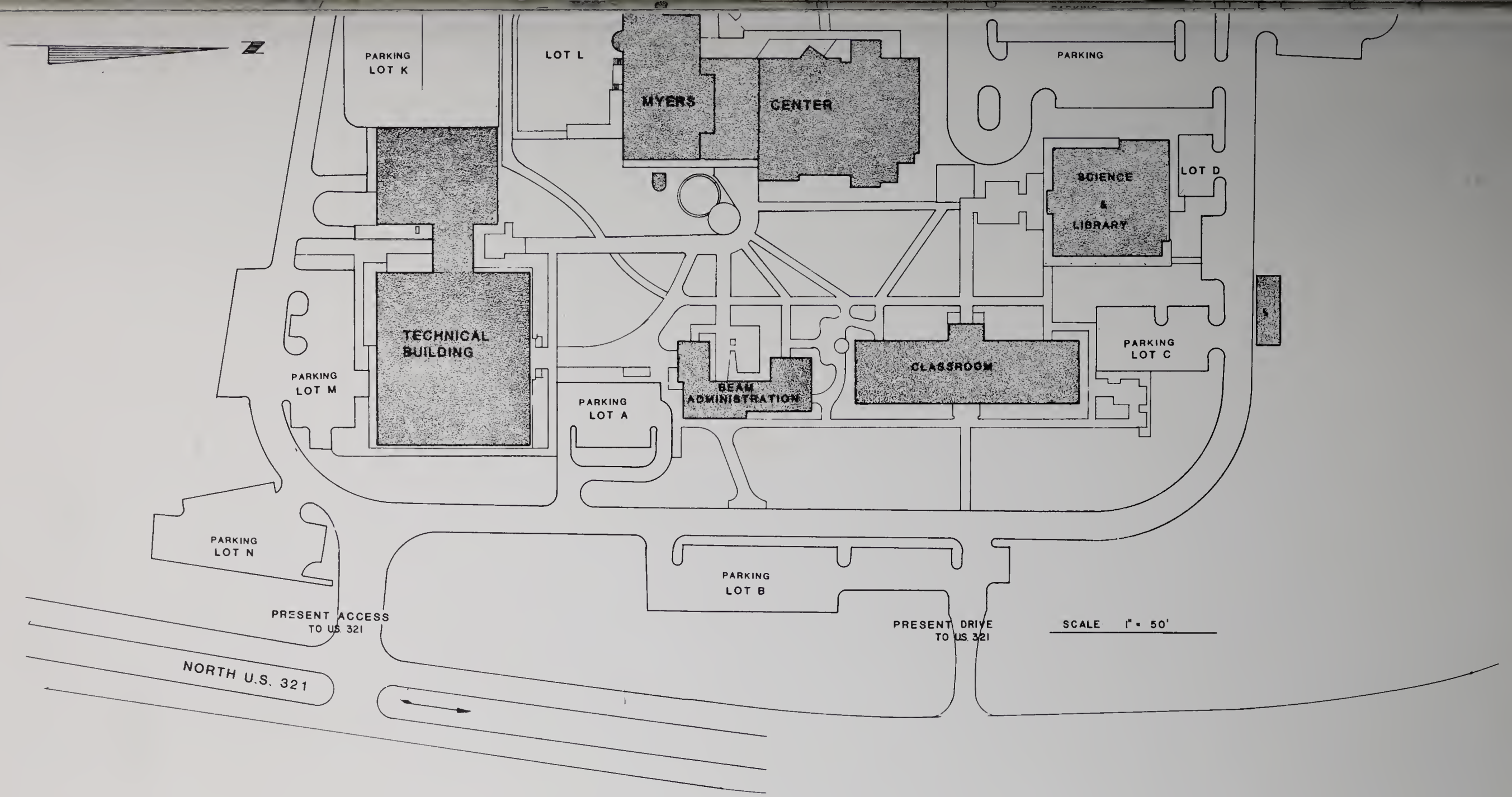
GASTON COLLEGE CAMPUS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TO US. 321
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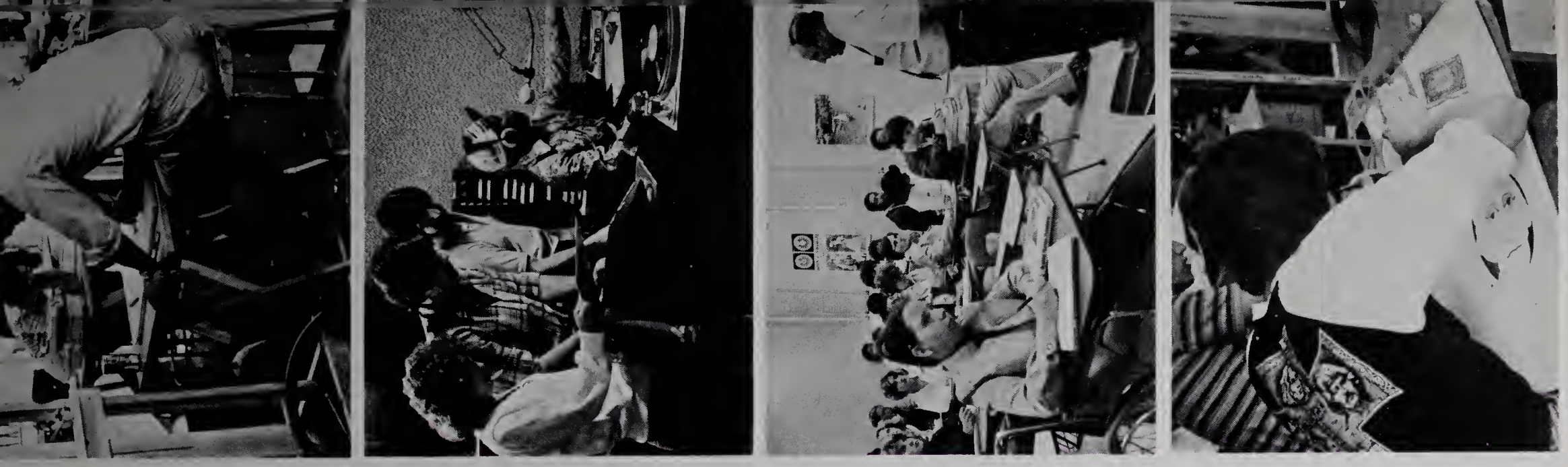

GASTON COLLEGE
Dallas, North Carolina 28034

There is a reason to life!
"We can lift ourselves out of ignorance, we can find ourselves as creatures of excellence and intelligence and skill. We can learn to fly!"

From Jonathan Livingston Seagull
by Richard Bach