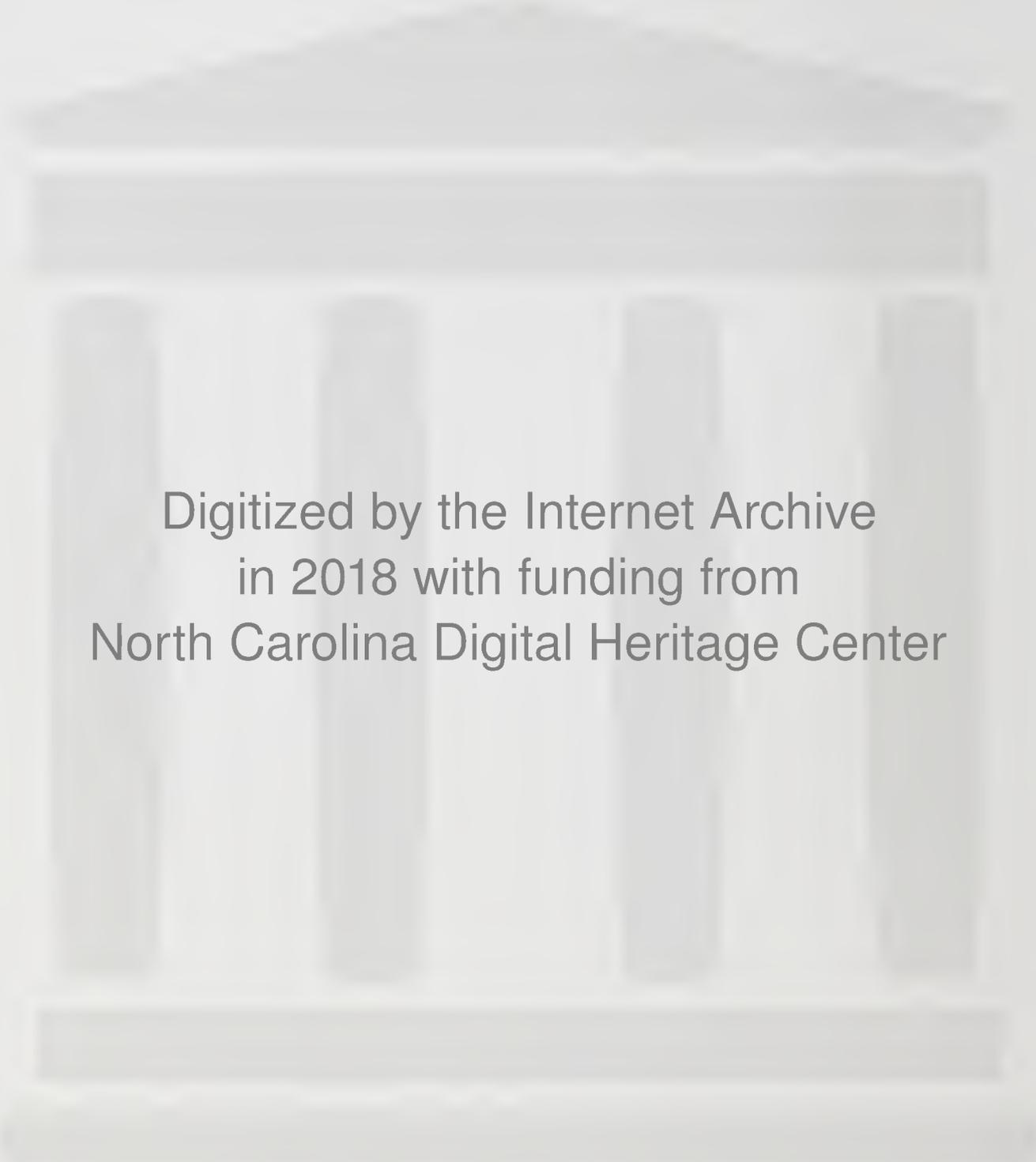


# SANDHILLS COMMUNITY COLLEGE





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LIBRARIES  
SANDHILLS COMMUNITY COLLEGE

**GENERAL  
INFORMATION**

# GENERAL CATALOGUE 1974-1976

**COLLEGE  
TRANSFER**

**TECHNICAL**



**VOCATIONAL**

**CONTINUING  
EDUCATION**

**COURSE  
DESCRIPTIONS**

**SANDHILLS  
COMMUNITY COLLEGE**

**COLLEGE  
PERSONNEL**

# ACADEMIC CALENDAR

1974-1975

## Fall Quarter, 1974

September 3, Tuesday	Continuing Education Registration (7-10 P.M.)
September 3 and 4, Tuesday and Wednesday	Faculty Meetings
September 4, Wednesday	Evening College Night Class Registration Continuing Education Registration (8 A.M.-5 P.M.)
September 5 and 6, Thursday and Friday	Registration
September 9, Monday	First Day of Classes
September 16, Monday	Add Period Ends
October 16, Wednesday	Drop Period Ends
November 22, Friday	Quarter Ends
November 25-29, Monday thru Friday	Thanksgiving Holidays

## Winter Quarter, 1974-75

November 26, Tuesday	Evening College Night Class Registration
December 2, Monday	Registration
December 3, Tuesday	First Day of Classes
December 10, Tuesday	Add Period Ends
December 23-January 1, Monday thru Wednesday	Christmas Holidays
January 2, Thursday	Classes Resume Continuing Education Registration (7-10 P.M.)
January 3, Friday	Continuing Education Registration (8 A.M.-5 P.M.)
January 21, Tuesday	Drop Period Ends
February 27, Thursday	Quarter Ends

## Spring Quarter, 1975

February 27, Thursday	Evening College Night Class Registration
March 3, Monday	Registration
March 4, Tuesday	First Day of Classes
March 11, Tuesday	Add Period Ends
March 28-31, Friday thru Monday	Easter Holidays

April 1, Tuesday	Classes Resume
April 1, Tuesday	Continuing Education Registration (7-10 P.M.)
April 2, Wednesday	Continuing Education Registration (8 A.M.-5 P.M.)
April 14, Monday	Drop Period Ends
May 21, Wednesday	Quarter Ends
May 23, Friday	Commencement

### **Summer Quarter, 1975—Full-Term Summer Quarter**

May 27, Tuesday	Evening College Night Class Registration
May 28, Wednesday	Registration
May 29, Thursday	First Day of Classes
June 5, Thursday	Add Period Ends
July 4, Friday	Holiday
July 8, Tuesday	Drop Period Ends
August 14, Thursday	Quarter Ends
August 15, Friday	Commencement

### **First Half Session of Summer Quarter, 1975**

May 28, Wednesday	Registration
May 29, Thursday	First Day of Classes
June 2, Monday	Add Period Ends
June 17, Tuesday	Drop Period Ends
July 4, Friday	Holiday
July 7, Monday	Quarter Ends

### **Second Half Session of Summer Quarter, 1975**

July 8, Tuesday	Registration
July 9, Wednesday	First Day of Classes
July 11, Friday	Add Period Ends
July 28, Monday	Drop Period Ends
August 14, Thursday	Quarter Ends
August 15, Friday	Commencement

# ACADEMIC CALENDAR

1975-1976

## Fall Quarter, 1975

September 2, Tuesday	Continuing Education Registration (7-10 P.M.)
September 2 and 3, Tuesday and Wednesday	Faculty Meetings and Registration
September 3, Wednesday	Evening College Night Class Registration Continuing Education Registration (8 A.M.-5 P.M.)
September 4 and 5, Thursday and Friday	Registration
September 8, Monday	First Day of Classes
September 15, Monday	Add Period Ends
October 15, Wednesday	Drop Period Ends
November 21, Friday	Quarter Ends
November 24-28, Monday thru Friday	Thanksgiving Holidays

## Winter Quarter, 1975-76

November 25, Tuesday	Evening College Night Class Registration
December 1, Monday	Registration
December 2, Tuesday	First Day of Classes
December 9, Tuesday	Add Period Ends
December 22-January 2, Monday thru Friday	Christmas Holidays
January 5, Monday	Classes Resume
January 5, Monday	Continuing Education Registration (7-10 P.M.)
January 6, Tuesday	Continuing Education Registration (8 A.M.-5 P.M.)
January 22, Thursday	Drop Period Ends
March 1, Monday	Quarter Ends

## Spring Quarter, 1976

March 2, Tuesday	Evening College Night Class Registration
March 3, Wednesday	Registration
March 4, Thursday	First Day of Classes
March 11, Thursday	Add Period Ends
April 1, Thursday	Continuing Education Registration (7-10 P.M.)

April 2, Friday	Continuing Education Registration (8 A.M.-5 P.M.)
April 12, Monday	Drop Period Ends
April 16 and 19, Friday and Monday	Easter Holidays
April 20, Tuesday	Classes Resume
May 21, Friday	Quarter Ends
May 23, Sunday	Commencement

### **Summer Quarter, 1976—Full-Term Summer Quarter**

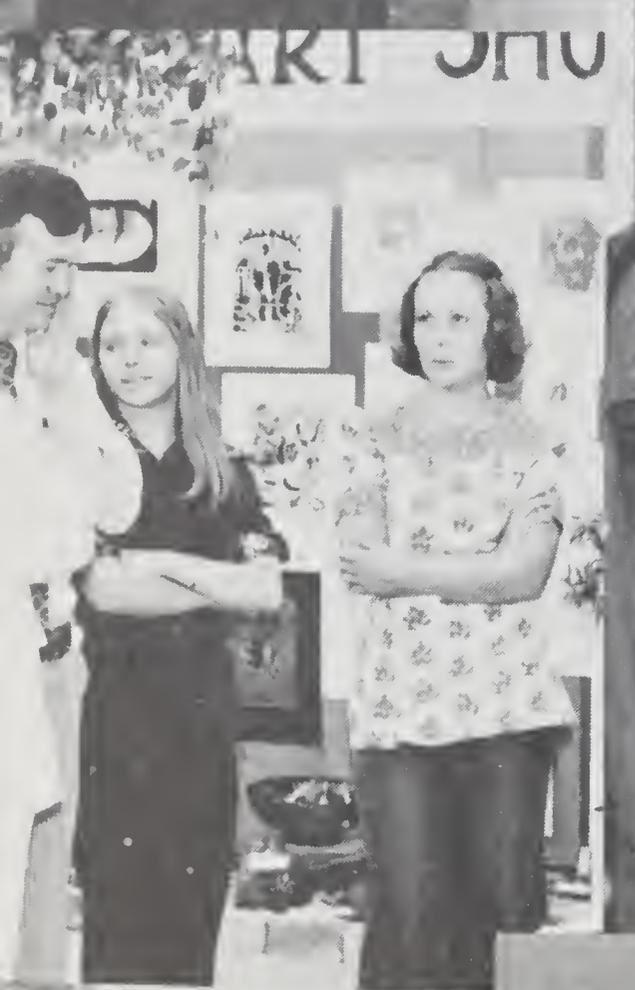
May 27, Thursday	Evening College Night Class Registration
May 31, Monday	Registration
June 1, Tuesday	First Day of Classes
June 8, Tuesday	Add Period Ends
July 5, Monday	Holiday
July 9, Friday	Drop Period Ends
August 17, Tuesday	Quarter Ends
August 18, Wednesday	Commencement

### **First Half Session of Summer Quarter, 1976**

May 31, Monday	Registration
June 1, Tuesday	First Day of Classes
June 3, Thursday	Add Period Ends
June 18, Friday	Drop Period Ends
July 5, Monday	Holiday
July 8, Thursday	Quarter Ends

### **Second Half Session of Summer Quarter, 1975**

July 9, Friday	Registration
July 12, Monday	First Day of Classes
July 14, Wednesday	Add Period Ends
July 29, Thursday	Drop Period Ends
August 17, Tuesday	Quarter Ends
August 18, Wednesday	Commencement



# GENERAL INFORMATION

## THE COLLEGE

### History

Sandhills Community College was established in December, 1963, under authority of the 1963 State Community College Act. Following the leadership of Representative H. Clifton Blue, Moore County citizens petitioned the State Board of Education and gained approval to establish a community college in the county and voted overwhelmingly for a one million dollar bond issue for construction and a tax levy for operation and maintenance of facilities. Before the end of 1963, the Board of Trustees had been named, an organizational meeting held, an architect selected, and Dr. Raymond A. Stone chosen as first president of the college.

In 1964 construction of facilities was begun on land given for the campus by Mrs. Mary Luman Meyer of Pinehurst. Temporary college offices were located in downtown Southern Pines. Classes began on October 1, 1965, in nine scattered locations. The science building was occupied in the Spring of 1966 and later that fall the college moved to its permanent home. Since 1966 the automotive trades building and the landscape gardening facility have been added, landscaping of the grounds completed, and the physical education field constructed. A greatly enlarged student center was occupied in February, 1972, featuring a multi-purpose hall for dining, lectures, plays, concerts, and social functions.

Today, the college offers to the student complete facilities for study and play. The campus is designed especially for the commuting student with informal drop-down seating, lounge and dining facilities, individual study carrels, an open stack library, and well-equipped laboratories, shops, and classrooms.

Sandhills has been fortunate to attract a highly competent faculty and staff. Specially-trained counselors provide assistance with admissions, course selection, financial aid, and student life. Experienced faculty members bring to their classes abundant preparation and a spirit of dedication to teaching and help to the student.

The student is assured of a high standard of learning opportunity. The college is accredited by the Southern Association of Colleges and Schools and the North Carolina Association of Colleges and Universities. The nursing program is specially accredited by the North Carolina State Board of Nursing and the National League for Nursing.

Enrollment figures tell the story of Sandhills. Starting with 384 students in 1965, the 1973 fall term enrollment reached 1355

students. In addition, thousands of adults participated in evening courses. The college draws its students principally from a fifty-mile radius but more and more come from the entire central section of North Carolina.

### **Purpose**

The purpose of Sandhills Community College is in accord with the North Carolina law under which it was established. This institution is a part of the system of community colleges set up by Chapter 115A, General Statutes of the state, and operates within the legal definition and authority of that statute. Sandhills has a vital role in providing educational experiences for individuals beyond normal high-school age, from a first grade education through the second year of college, including academic, occupational, and general adult education. This role is derived from a firm belief in the worth, dignity, and potential of each individual for making his unique contribution to society. The college further believes that learning includes the development of personal values and attitudes, a spirit of inquiry, and the acquisition of concepts and knowledge; and that this institution has the broad responsibility for raising the economic, educational, and social levels of the people of the Sandhills area.

Within the context of the philosophy of the Community College System of North Carolina, Sandhills College seeks to provide a total educational environment conducive to higher educational achievement and the realization of the diverse goals which will foster the optimum development of each individual. As a comprehensive community college, Sandhills seeks to provide academic, occupational, and general adult education.

### **Programs of Study**

Instructional programs are offered for students beyond normal high school age to correspond to the comprehensive purposes of the college.

**Developmental and Remedial Programs.** Courses are offered on and off campus at several levels for students who have weaknesses in reading, English and mathematics.

At the first level, students who wish to improve their reading skills may enter an on or off campus adult basic education (ABE) program. After developing basic skills in reading, these students may earn a high school diploma by entering one of several area Fundamentals Learning Laboratories provided by the college.

At the next level, students who wish to engage in college work but who have weaknesses in English and mathematics

and who need to develop stronger skills in reading may enter an on-campus Developmental Studies Program. Successful completion of this program will pave the way for entrance into several kinds of college work described in the next two sections.

**College Transfer Programs.** Liberal arts and science courses at the freshman and sophomore levels are offered which lead to the associate in arts or associate in science degrees. Credits earned in courses required for the associate in arts and associate in science degrees may be transferred to senior colleges and to universities. Students who wish to pursue a program of study leading to a baccalaureate degree may enroll in the associate in arts or associate in science degree programs. Students are given assistance in selecting courses that will be appropriate for baccalaureate degree programs at senior institutions.

The college offers a general college program for students who want a two-year college education but who do not wish to pursue a baccalaureate degree at a senior institution. Such students are assisted in the selection of courses that will meet their own special needs and are awarded an associate in general education degree upon completion of the program.

In addition to the three college degree programs described above, college courses are made available throughout the year to students who wish to further their education by taking one or more courses but who do not seek a degree.

**Occupational Education Programs.** Two-year technical programs are offered leading to the associate in applied science degree and to employment in business, industry, health, agriculture, and social services. Such programs are comprised of general and specialized courses required for successful employment in a technical occupation.

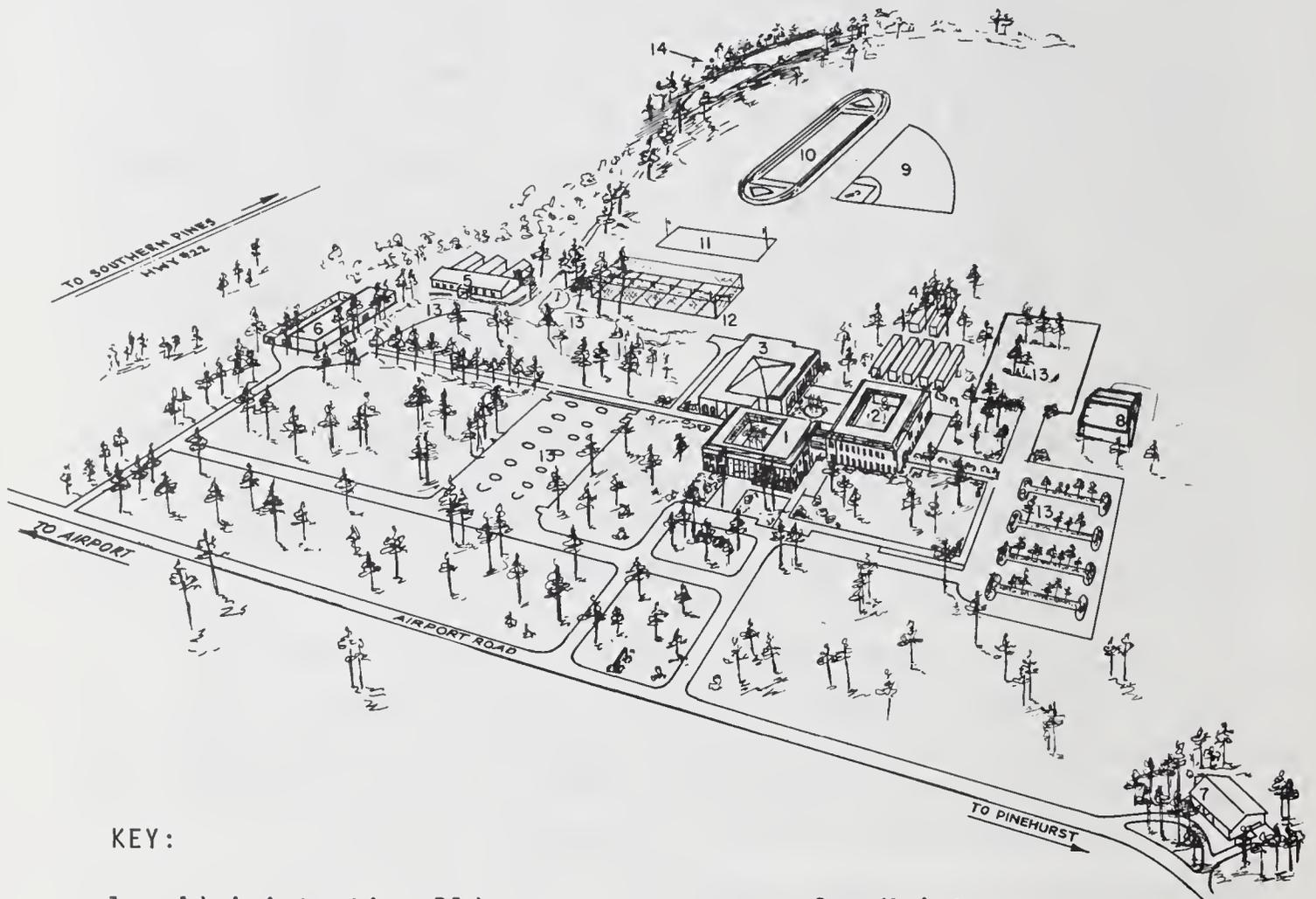
One-year vocational programs are offered leading to a diploma and to employment in health, business and industry. These programs are made up of general and vocational courses selected to give a student the understandings and skills needed to be successful on the job.

Both the technical and vocational courses that comprise occupational education programs are made available to students who wish to take one or more of them to improve their own employability but who do not seek a college degree or diploma.

Occupational education courses are made available to employed adults who need training or retraining to remain

# SANDHILLS COMMUNITY COLLEGE CAMPUS

SOUTHERN PINES, NORTH CAROLINA



**KEY:**

- |                           |                              |
|---------------------------|------------------------------|
| 1. Administration Bldg.   | 8. Maintenance               |
| 2. Mary Luman Meyer Bldg. | 9. Baseball Field            |
| 3. Student Union          | 10. Track                    |
| 4. Mobile Units           | 11. Outdoor Basketball Court |
| 5. Horticulture           | 12. Tennis Courts            |
| 6. Automotive             | 13. Parking Areas            |
| 7. President's Home       | 14. Lakes                    |

230 Acre site  
 Five classroom-laboratory buildings  
 Seven mobile classroom-office units  
 Physical education field  
 President's Residence  
 Two lakes

productive in their jobs. Such courses are offered on and off campus at hours compatible with the work schedules of students.

**Continuing Education Programs.** Courses are offered on and off campus to people to meet their expressed educational needs. These courses have to do with the development of the adult population socially, culturally and in terms of community affairs.

### **Physical Plant**

A modern, air-conditioned, three-building complex forms the heart of the campus. An automotive trades building, landscape gardening facility, physical education field, and several mobile units for classrooms and faculty offices are located within easy walking distance from the center of the campus.

The Administration Building provides space for administrative offices, the learning resources center, business education, unspecialized classrooms, the learning laboratory, and a large lecture hall. Around the upper level of the library, faculty offices and dial-access audio laboratories are located.

The Mary Luman Meyer Building is primarily devoted to science and technology. This building contains modern and fully-equipped laboratories for chemistry, physics, biology, electronics, nursing, design and art. The counseling center and a reading laboratory are located on the first floor across the rear courtyard from the Student Center.

The Student Union Building is the center of student life on campus when students are not in class. A large spacious lounge for study and quiet conversation features an open fireplace. The college food service is located at the rear of the building, providing both over-the-counter, hot meals and light snacks from vending machines. The cafeteria serves breakfast and lunch. A large classroom for physical education with showers and lockers for men and women is located opposite the student lounge and provides direct access to the physical education field. The bookstore, where books, student supplies, and notions may be purchased, is located left of the entrance to the building.

The Student Union Building features a large multi-purpose center for dining, drama, music and social events.

The Automotive Building provides classroom and laboratory space for auto mechanics and body repair. Both of these learning areas are well-equipped with up-to-date tools and machines.

The Horticulture Building consists of two classrooms; a plant laboratory and a large storage room for equipment and office space. Three greenhouses are attached to the building. A two-bed apart-

ment is provided for horticulture students who take turns caring for plant material around the clock.

The Maintenance Building houses the college maintenance and service shops and also serves as the central point for shipping and receiving.

The campus is noted for the beauty of its landscape. Access to the parking areas and to the buildings is along driveways and walkways bordered by blooming plants and shrubs native to the area. Concrete and wooden benches and wide ledges provide outdoor, drop-down seating for conversation, study, or quiet meditation.

### **Resources for Learning**

**The Library.** The library, located in the Administration Building, provides comfortable, pleasant surroundings for study and recreational reading. Open stacks for easy access to materials and individual carrels invite browsing and the pursuit of non-academic interests as well as curricular requirements. The library's book collection totals about 30,000 volumes, with current periodical subscription totals of approximately 290. Both are selected to serve students and to encourage leisure use of the printed word. Microfilms include the New York Times complete from its beginning in 1851 and a substantial and increasing number of retrospective runs of magazines and journals. Reader-printers for use of film and a copying machine for reproducing other materials are available. Professionally trained librarians instruct students in the use of the library and assist with reference questions and book selection. The library is open from 7:30 a.m. to 9:30 p.m. Monday through Thursday and from 7:30 a.m. to 5:00 p.m. on Friday.

**The Audiovisual Center.** Sandhills Community College provides audiovisual services for faculty and students with offices located on the second floor of the Administration Building. The Audiovisual Center maintains a library of 16mm sound, motion picture films, filmstrips, records, tape recordings, and other instructional materials. The Center is open from 7:30 a.m. to 5:00 p.m. Monday through Friday. Students and faculty are welcome to use the materials at any time, and areas are available for preview purposes.

**The Learning Laboratory.** "The Learning Lab" is open to adults who wish to complete high school and college students who need to strengthen skills in a wide variety of courses. The lab is staffed by coordinators who help each student find his present level of learning before placing him in programmed texts for self-instruction. Adults may prepare for the high school examination, improve skills used on the job, or study subjects for per-

sonal advancement. High school graduates can find review and refresher courses designed to make the transition to college and technical level work easier.

## **ADMISSION TO THE COLLEGE**

### **Admissions Policy**

Sandhills Community College maintains an "open door" admissions policy for all applicants who hold a high school diploma or who hold a high school equivalency certificate. School leavers eighteen years old or older may also enroll.

### **Admissions Procedure**

Application forms may be obtained from the Student Services Division, Sandhills Community College. All entering students are required to submit a personal data sheet, a self-report medical record, and evidence of high school completion.

### **Transfer Students**

A transfer student is one who is granted credit toward a Sandhills Community College degree or diploma program for work taken at other institutions of higher education. In addition to submitting all other application materials, students desiring to receive transfer credit must have official transcripts sent to Sandhills by the institution which granted the credit originally. Transfer students who have earned as many as twelve quarter hours of credit in other institutions of higher education will not be required to take the placement test.

Sandhills Community College will consider granting credit for work done at all institutions of higher education. Generally, grades of "C" or better will be considered for credit.

### **Admission of Special Students**

Special students, or students not seeking a degree, need only submit a personal data sheet, self-report medical form, and evidence of high school completion for admission. Special students may be asked to participate in the placement testing program if they desire to be reclassified as regular students with intent to pursue and earn a degree or diploma.

### **Establishing State Residency**

"To qualify for in-state tuition a legal resident must have maintained his domicile in North Carolina for at least the 12 months immediately prior to his classification as a resident for tuition purposes. In order to be eligible for such classification, the indi-

vidual must establish that his or her presence in the State during such twelve-month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education; further, (1) if the parents (or court-appointed legal guardian) of the individual seeking resident classification are (is) bona fide domiciliaries of this State, this fact shall be prima facie evidence of domiciliary status of the individual applicant and (2) if such parents or guardian are not bona fide domiciliaries of this State, this fact shall be prima facie evidence of non-domiciliary status of the individual."

"Regulations concerning the classification of students by residence for purposes of applicable tuition differentials, are set forth in detail in **A Manual To Assist The Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes**. Each enrolled student is responsible for knowing the contents of that manual, which is the controlling administrative statement of policy on this subject. Copies of the manual are available on request at the office of the dean of students."

## FINANCIAL INFORMATION

The basic tuition and fee structure at Sandhills Community College is in accordance with policies established by the North Carolina Board of Education. Tuition must be paid at the time of registration.

### Tuition

#### College Transfer Program:

Fourteen (14) quarter hours or more .....\$42.00 per quarter  
Less than fourteen quarter hours ..... 3.00 per credit hour

#### Vocational, Technical, and Developmental Programs:

Thirteen (13) quarter hours or more .....\$32.00 per quarter  
Less than thirteen hours ..... 2.50 per credit hour

#### Out-of-State Students, All Programs:

Twelve (12) quarter hours or more .....\$137.50 per quarter  
Less than twelve hours ..... 11.45 per credit hour

### Fees

**Student Activity Fee**—This fee is mandatory for all full-time credit students. Part-time students taking eight to eleven credit hours must pay one-half the fee; part-time students taking less than eight hours may pay one-half the fee or opt not to pay it at all. The fee division is as follows:

**Fall Quarter:**

Student Activity, Student Government Assn. ....	\$4.50
Athletics .....	4.50
	\$9.00

**Winter and Spring Quarters:**

Student Activity, Student Government Assn. ....	\$4.00
Athletics .....	4.00
	\$8.00

**Summer Quarter:**

Student Activity only (\$1.00 per session) .....	\$2.00
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**Parking Fee**—All students who drive and park vehicles on campus must pay a \$1.00 fee to register those vehicles.

**Graduation Fee**—Graduating students are expected to participate in graduation exercises. Fees for this participation will be as follows:

Cap and Gown .....	\$5.00
Diploma .....	2.50
	\$7.50

**Extension and Adult Education Fees**—These fees are determined by the course.

**Special Program Expenses****Architectural and Civil Engineering Technology Programs**

Drafting Equipment (Approx.) .....	\$35.00
Accident Insurance (24 hr./day) (annual) (Approx.) .....	14.50
	\$49.50

**Automotive Programs**

Automobile Body Repair Tools (Approx.) .....	\$60.00
Automobile Mechanic Tools (Approx.) .....	\$110.00

**Carpentry Program**

Tools (Approx.) .....	\$25.00
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**Human Resource Development Program**

Off campus group training sessions (annual) (Approx.) .....	\$35.00
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**Landscape Gardening Program**

Accident insurance for twenty-four (24) hour coverage (annual) (Approx.) .....	\$14.50
Summer field trip (Approx.) .....	35.00
Drawing Set (Approx.) .....	35.00
	\$84.50

**Medical Laboratory Technology Program**

(2nd Year Students)

Uniforms (incl. shoes) (Approx.) .....	\$70.00
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**Nursing Program**

Malpractice Insurance (annual) .....	\$ 5.00
Uniforms .....	70.00
	\$75.00

**Practical Nurse Education Program**

Malpractice Insurance (annual) .....	\$ 5.00
Name tag (Approx.) .....	1.00
Scissors (Approx.) .....	2.50
Shoes (nursing) (Student choice) .....	5.00
	\$13.50

**Refunds**—Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds ( $\frac{2}{3}$ ) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar.

**Student Accident Insurance**—Accident insurance is available to students, faculty and staff on a voluntary basis. The annual premium is \$2.25. Arrangements for this coverage can be made during registration or through the business office. Students using college transportation must have this or similar insurance coverage. Insurance coverage for students enrolled in programs requiring a more complete accident insurance plan may get such insurance through the business office.

## STUDENT LIFE AND SERVICES

The Student Services Division of the college includes the Dean of Students, the counseling staff, and the Registrar. This division has as its purpose to constantly strive for the improvement of the quality of student life on the Sandhills campus. It is the responsibility of this division to provide for all the following functions.

**Registration**

The first days of each quarter are used for registration. This consists of being assigned to classes and paying tuition and fees. An extra fee will be charged for late registration.

**Records**

All records of the student's academic progress are supervised by the registrar. A student may view and review his academic record with the registrar at any time.

Students who need verification and certification of enrollment and academic progress will usually obtain these from the registrar. This office will assist veterans and others who need to provide outside agencies with certification of enrollment and attendance.

**Student Activities**

The student activities program at Sandhills attempts to provide the student with meaningful leisure time activities, experience in self-government, and opportunities for educational, vocational, and social development.

Student government gives students an opportunity to experience the democratic process in self-government, and it provides a vehicle for communicating student opinion and concern to the administration and faculty of the college. Student government committees plan and coordinate programs, concerts, lectures, and social occasions.

Sandhills Community College is a member of the Cavalier-Tarheel Athletic Conference which includes community and junior colleges from North Carolina and Virginia. Teams are fielded for intercollegiate play in basketball, baseball, tennis, and golf.

There is a strong and growing drama program at Sandhills. Students have the opportunity to participate in any of several dramatic productions each year. There are performing organizations, individual instruction, and general music classes for students interested in music.

In addition, students produce a newspaper and a yearbook. There are several clubs and organizations which offer other opportunities for students to participate in activities which are of interest to them.

**Guidance**

A counseling center is maintained on the Sandhills Community College campus. The center is staffed by professionally trained counselors who endeavor to assist students in decision-making in the areas of educational, vocational, and personal concerns. Counselors are regularly available to students for individual counseling.

Each entering student has a pre-enrollment interview with a counselor.

The counseling staff maintains an up-to-date and comprehensive collection of educational and vocational information. This information is readily available to students and is designed to keep them abreast of developing educational and vocational opportunities.

In addition to services provided by the counseling center, students are assigned faculty advisors to assist them in program planning and course selection.

### **Tutorial Services**

An organized program of tutorial services is provided to supplement the instruction given in each course. Early in each quarter, students are encouraged to contact the coordinator of tutorial services to arrange tutoring sessions. Faculty members also encourage students to use tutorial services when such services are perceived by faculty members to be needed. Tutoring services are rendered by other students, by faculty and by subject matter specialists from the community. Students may receive tutoring services to the extent of need—from one session to an unlimited number of sessions throughout the quarter. Tutorial services are provided for students free of charge.

### **Student Financial Aid**

Sandhills Community College has a commitment to the people of the Sandhills area to provide a quality education for anyone who can profit from such an experience. The college wishes to help those who can benefit from one of Sandhill's many programs. A lack of adequate funds should not deter any individual, regardless of race, creed, or color, from seeking admission.

Although the student and his parents are expected to make reasonable sacrifices to meet college expenses, financial assistance may be available to a needy student through the college in the form of scholarships, loans, work-study programs and/or Economic Opportunity Grants. A student desiring financial assistance through the college should make a formal application to the financial aid counselor as soon as his decision to attend Sandhills is final.

### **Job Placement Service**

The financial aid counselor is also the coordinator of the Job Placement Service. This program endeavors to assist students in establishing contact with prospective employers, inviting many such employers to the campus to interview students. In addition, communication is maintained with many local employers who are en-

couraged to provide part-time work opportunities to Sandhills students.

### **Student Housing**

Sandhills Community College was established to provide education for students within commuting distance. Since the college has no dormitories, the student is responsible for arranging his own housing.

### **Automobile Registration**

Students are required to register any vehicle which they will operate on campus. A nominal fee will be charged for the vehicle registration which will be filed in the office of the dean of students.

### **Student Conduct**

The administration of Sandhills Community College prefers to emphasize the importance of guidance, counseling, and example in promoting the development of acceptable student conduct. When these fail, disciplinary action will be taken consistent with the regulations and procedures set forth in the Judicial Code printed in the Student Handbook.

### **Cafeteria and Bookstore**

A fully-staffed cafeteria offers breakfast and lunch meals for students, faculty and administration at reasonable prices. This food service is supplemented by extensive vending machine selections of sandwiches, drinks, candy and cigarettes. Change machines are also provided. Required textbooks, notebooks, and other school supplies and accessories are sold in the Sandhills Community College Bookstore.

## **ACADEMIC POLICIES**

### **Auditing Courses**

Students who wish to audit courses must follow the usual procedure for registration. Auditors receive no credit but are encouraged to attend classes regularly and participate in class discussions. Auditors will be charged the same fees as students taking courses for credit. A grade of "Au" will be entered for auditing a course.

### **Classification of Students**

For purposes of administration, the following student classifications have been specified.

- Full-time student — the student enrolled with twelve (12) or more quarter hours of credit courses.
- Part-time student — the student enrolled with fewer than twelve (12) quarter hours of credit courses.
- Special student — a student who enrolls at Sandhills Community College for a purpose other than pursuing a degree or diploma program.
- Freshman — the student who has completed with a passing grade less than thirty-six (36) quarter hours of credit courses.
- Sophomore — the student who has completed with a passing grade thirty-six (36) or more quarter hours of credit courses.

### **Program of Study Placement**

All students admitted to the college must take an appropriate placement test prior to actual enrollment. After taking the placement test, the student will be interviewed by a counselor on the campus. During this interview, determination will be made concerning the student's placement in a specific program of study. Placement in programs is determined by interests of students, results of placement tests, high school records, and medical and health limitations. Also, developmental or remedial course work may be recommended as a condition for placement in a particular program of study.

### **Course Load Policy**

The normal course load for a student in the college transfer program is 16 hours; for the student in the technical programs, 18 hours. A request to exceed this may be approved by the advisor where the increase is due to difficulty in scheduling. Registration with as many as 19 hours in the college transfer program or 20 hours in the technical program must carry the approval and signature of the advisor.

### **Academic Advising**

After placement in a program of study, each student is assigned an academic advisor whose responsibility is to assist the student in planning a program and in periodic evaluation of student progress. The primary function of the advisor is to facilitate student progress toward an associate degree or a diploma at Sandhills. Although the advisor will assist, it is the responsibility of the student to become familiar with the requirements of institutions to which he might transfer.

### **Change of Program**

To effect a change from one program of study to another, a student must confer with his academic advisor and with a counselor. After discussing all factors involved, the counselor notifies the registrar of any program change that is to take place.

When the advisor feels that a student is not making satisfactory progress or when the advisor has reason to doubt the validity of the program of study placement of the student, the advisor may recommend to the chairman of the department that the student be referred to the Counseling Center for a change in program. If the department head concurs, the student will be referred to the Counseling Center for change in program.

### **Courses Repeated for Credit**

When a course is repeated, only the higher grade will be counted in determining the hours earned and grade point average.

### **Dropping and Adding Courses**

Course changes, including both adding and dropping courses, will be carried out by the student with the consent of the advisor. Such changes become effective only when reported to the registrar. No one may be enrolled in a course later than one week after the beginning of the quarter. If a course is dropped before mid-term, no record will be made of registration for that course.

### **Grading Policy**

Grading the performance of students in course work is the responsibility of individual faculty members. Evaluation of student performance, in essence, is the exercise of professional judgment by individual faculty members.

Grading is a two-step process. First, students are divided into two groups—those who have met the minimum requirements of the course and those who have not met minimum course requirements. Secondly, both groups of students are subdivided into several grade categories.

Grading categories and symbols for students who have met minimum course requirements are:

Superior (A) — to represent superior student performance

Good (B) — to represent good student performance

Passing (C) — to represent student performance judged to have met at least minimum course requirements but not classifiable as good or superior performance

Credit by (CE) — to represent credit earned by examination

Examination procedures of the college  
 Audit (Au) — to represent successful participation as auditor of a course

Grading categories and symbols for students who have not met minimum course requirements are:

Failure to Meet Course Requirements (F) — to represent student performance judged to require repetition of the course.

Incomplete (I) — to be used when at least the minimum course requirements may be met by students during a subsequent quarter without repetition of the entire course. When a student removes the grade of "I", the record on the transcript will be struck through and the new grade will be entered.

Withdrawal (W) — to be used when students withdraw officially from the college prior to two calendar weeks before the end of the quarter and when other grading categories do not apply. When students withdraw from college during the last two weeks of the quarter, individual faculty members will determine the grade to be issued excluding the "withdrawal" category.

Grade point averages will be computed only for the purpose of determining honor students.

The college tries to encourage and facilitate student performance in course work. As a basis for identifying good student performance, quality points are assigned to grades as follows:

Grade	Quality Points
A .....	4
B .....	3
C .....	2

### **Attendance Policy**

Faculty members are responsible for informing students in writing of class attendance expectations at the first class meeting of every quarter.

Students are expected to attend all classes. On the other hand, the faculty member must at least allow the student a number of absences equal to the number of times the class meets per week. However, it is permissible for an individual faculty member to allow students in his classes to accumulate unlimited absences. It is permissible too for a faculty member to set the allowable number of absences anywhere between these two extremes.

The faculty member will have the prerogative to make exceptions to his own attendance policy in any particular case.

Students who violate the attendance policy of a faculty member will be given an "F" grade for the course, unless the instructor

chooses to make an exception to the policy. In cases where violations occur and a grade of "F" is given, the instructor will then notify the dean of students. In any case, the student shall be given the option of continuing to attend the class through the end of the quarter.

Students will be expected to begin class attendance at the first class meeting of the quarter or at the first meeting following completion of a drop-add slip.

Students will be expected to attend all laboratory sessions or to make up any laboratory absence.

Students should not be charged absent when the absence is for participation in an activity approved by the dean of instruction or the dean of students.

Faculty members should inform students at the first class period if cases of tardiness are to be computed in the student's record.

### **Academic Review Policy**

The Academic Review Policy has been developed in the interest of students and their advisors and for their use as they work together in planning the student's academic program. Its purpose is to protect the student against undirected and unrealistic scholastic pursuits.

Every student is required to consult with his advisor during the registration period. At this time, students who have accumulated grades of "F" should be counseled by advisors to consider possible course load reductions, removal of "F" grades, and, in some instances, changes in program of study.

Upon the accumulation of fifteen (15) hours of "F" grades in courses which are required for the completion of the student's particular program, the advisor shall apprise the students of the following options:

1. No additional required courses shall be attempted, until at least one-half of the hours graded "F" in required courses have been successfully completed.
2. A change of program should be arranged following consultation with a counselor.

### **Withdrawal from College**

Any student who withdraws from Sandhills Community College either during a quarter or at the end of a quarter for any reason should initiate withdrawal proceedings at the office of the dean of students and describe reasons for withdrawal. The college might be able to take corrective action which would permit the student to remain in school.

**Replacement in Program**

For students who have withdrawn, either voluntarily or involuntarily, from a program of study, the following procedures should be followed in order for that student to be replaced in the program.

1. The student should confer with a counselor in the Counseling Center.
2. The counselor may recommend to the appropriate Department Chairman that the student be replaced into the program. Such recommendation should be based upon the student's demonstration that he has taken remedial action which would likely prevent a repeat of his earlier failure to complete the program.
3. The Department Chairman will have final responsibility for approving a student's replacement into a program within the department.

**Credit for Nontraditional Educational Experiences**

Credit by examination may be given for many Sandhills Community College courses when a student can demonstrate proficiency in the subject matter involved. Such proficiency may have been achieved in nontraditional educational experiences, including work experiences. Proficiency may be demonstrated in the following ways:

1. Examinations developed by Sandhills Community College faculty
2. Standardized nationally-administered examinations developed for this purpose (e.g., CLEP, USAFI).

A student desiring to receive credit in either of the above ways should make application to a counselor. If he desires to take a college-developed and administered examination, appropriate application forms can be obtained from a counselor. If he has taken standardized nationally-recognized tests, he should have score reports mailed to the registrar at Sandhills Community College. To be eligible to receive credit for nontraditional educational experiences, a student must have been placed in a program of study.

**Guided Independent Study**

Students wishing to take college courses listed in this catalog through independent study may do so by securing the approval of the instructor of the course prior to registration. The student must submit an agreement containing work to be accomplished during the quarter, including test requirements, term papers, and required reading and/or laboratory work. A copy of the agreement must be forwarded to the dean of instruction for final approval. To obtain

credit for work attempted through independent study, the student must complete all requirements of the agreement and must hold conferences with the instructor at least once weekly.

The regular grading system applies to all independent study. Grades earned have the same status as those required through regular class attendance.

### **Student Honors and Awards**

Sandhills Community College recognizes student academic achievement by identifying students who qualify for the Dean's List and those who qualify as Honor Graduates.

#### **Dean's List**

A student may achieve the distinction of being placed on the Dean's List by earning a "B" average or better or by achieving a 3.0 quality point ratio on twelve (12) or more quarter hours work. The student can have no grade less than "C" on any course taken. The Dean's List will be published following the report of quarterly grades.

#### **Honor Graduates**

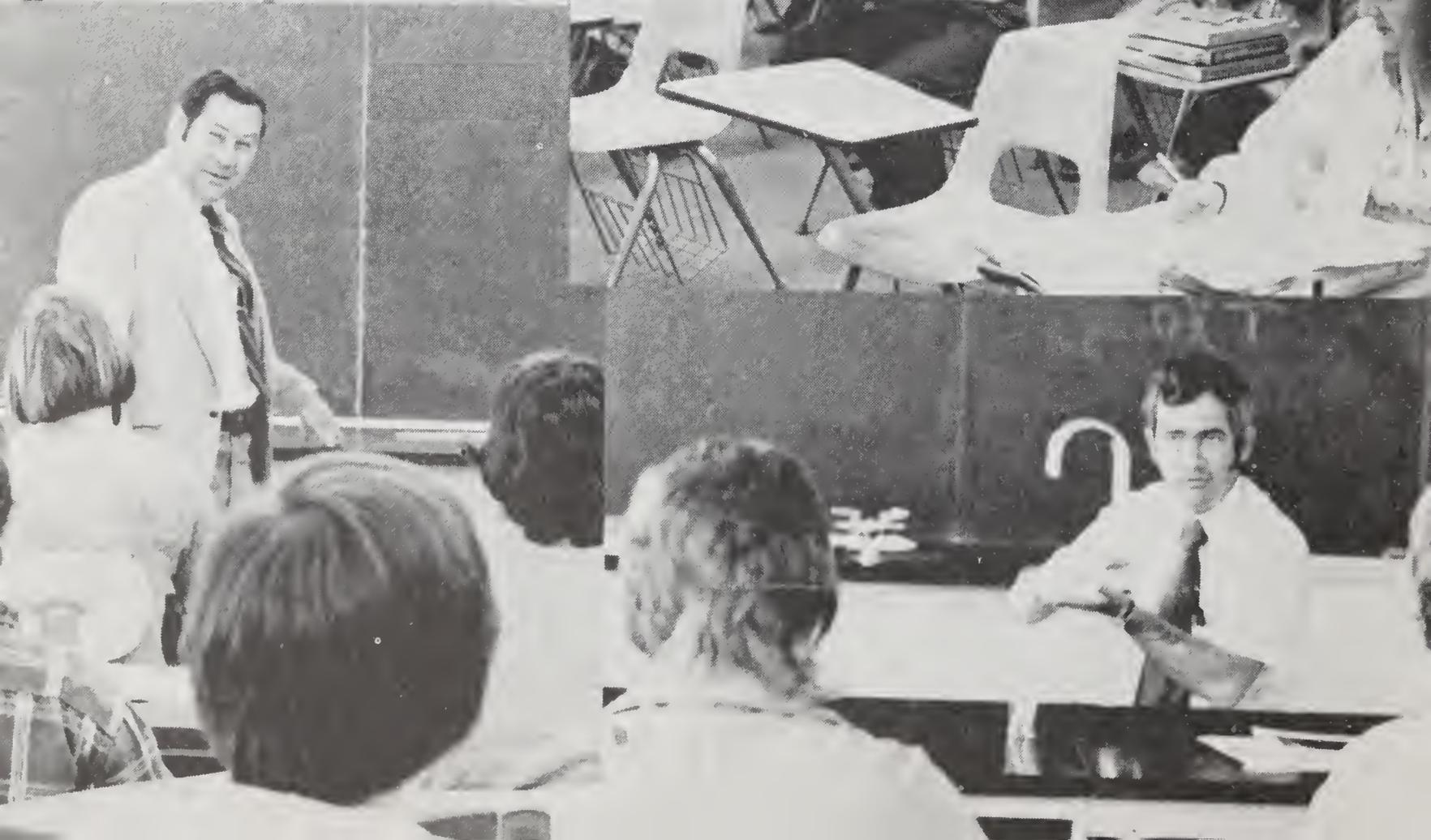
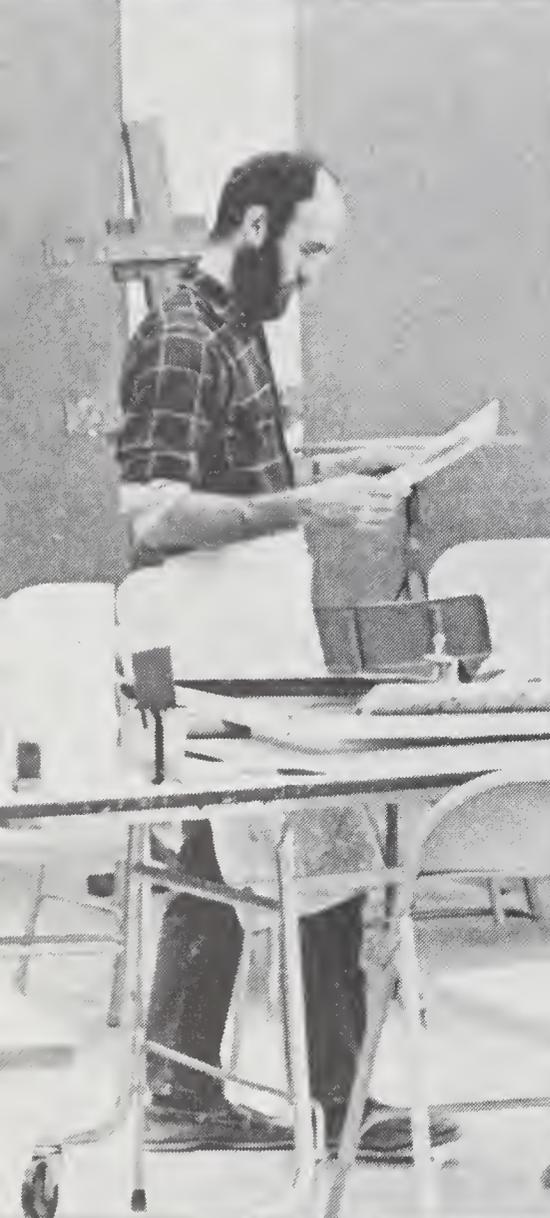
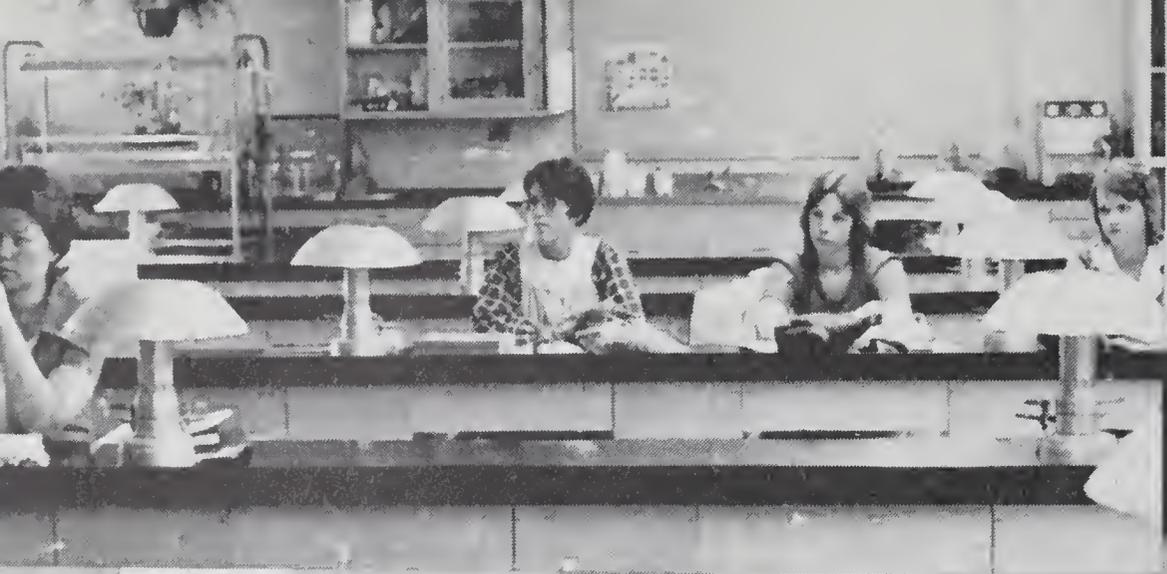
A student may achieve Honor Graduate recognition during graduation exercises by maintaining a 3.5 quality point ratio on all work attempted during the period he is enrolled at Sandhills Community College.

#### **Final Examinations and Tests**

Examinations should provide an opportunity for the student to express his understanding of the subject matter of the course. They serve as a means of reviewing and organizing the course for the student. Examinations include problems which require the student to make application of the material he has learned in the course.

Final examinations, term papers, or special projects are usually required in all courses. Instructors keep completed examinations on file for one quarter following the examination.

Instructors may give mid-quarter or other announced tests as they deem necessary. A student who is absent from an announced test for justifiable reasons will be allowed to take a make-up test at a time mutually convenient to him and the instructor.



# COLLEGE TRANSFER PROGRAMS

## GENERAL INFORMATION

The college transfer programs are designed to provide course work which is transferable to senior institutions. A community college advisory committee, including representatives of state-supported colleges, has worked with the Department of Community Colleges and Sandhills Community College to assist in the development of curricula acceptable to senior institutions. Courses should transfer to the institution which the student plans to attend during the junior and senior years if they are applicable to the curriculum in which he enrolls. The student should be able to transfer to the senior institution with junior status after graduation with the Associate-in-Arts or Associate-in-Science degree from Sandhills.

The faculty advisors and the college counseling staff work closely with the student in course selection. **It is the responsibility of the student, however, to familiarize himself with the requirements of the senior institution to which he intends to transfer.**

## ASSOCIATE DEGREE REQUIREMENTS

The requirements for an associate degree are as follows:

1. Completion of at least ninety-six (96) quarter hours of credit, including all requirements applicable to a particular degree program. (See below)
2. Completion of twenty-four (24) quarter hours of credit at Sandhills.
3. In residence at Sandhills Community College as a full-time student for two quarters immediately prior to graduation. (NOTE: In some cases, a student who leaves Sandhills Community College with less than ninety-six [96] hours may enroll in another institution and have credits earned there applied to a Sandhills Community College degree. This exception would be allowed only if the student petitioned the appropriate dean at Sandhills prior to enrollment in another institution, and only if the hours to be taken at the other institution and applied to a Sandhills degree did not exceed twelve [12].)

### Requirements for the Associate-in-Arts Degree

The Associate-in-Arts Degree is recommended for students who plan to transfer to senior colleges and universities to pursue programs of study in business administration, business education, education, law, liberal arts, music, or other areas leading to the Bachelor of Arts degree.

The Associate-in-Arts Degree candidates must complete the following courses:

	Quarter Hours
<b>English</b> .....	15
110 (or 110a), 111, and 112 English Composition and two (2) of the following:	(9)
ENG 205, 206, 207, 208, 209, 210, 212, 213, 214, 215, 216 and 217.	(6)
<b>Mathematics</b> .....	5
103 Basic Concepts of Mathematics I or 110 College Algebra or higher level math course	(5)  (5)
<b>History</b> .....	10
*History 110, 111; Western Civilization I, II or History 151, 152; United States History I, II or one of the above and HIS 153; Afro-American History	(10)  (10)
<b>Science</b> .....	12
(three courses in laboratory science)	
** <b>Physical Education</b> .....	6
Physical Education 150 Personal and Community Hygiene Activity Courses	(3) (3)
<b>Humanities and English</b> .....	8
(Additional hours in Art Appreciation, Drama, Foreign Languages, History, Literature, Music Appreciation, Philosophy, Religion or Speech)	
Total General Requirements .....	56
<b>Electives</b> .....	40
(Courses to be selected from Humanities, Mathematics, Science, Behavioral Sciences, and designated business courses)	
TOTAL REQUIRED .....	96 hrs.

\* Students planning to transfer should determine the social science requirement of the senior institution to which they plan to transfer.

\*\* Physically disabled students or veterans of military service are exempted from the physical education activity course requirements.

### Requirements for the Associate-in-Science Degree

The Associate-in-Science Degree is recommended for students who plan to transfer to senior colleges and universities to pursue programs of study in agriculture, dentistry, engineering, forestry, mathematics, medicine, pharmacy, science, textiles, or other areas leading to a Bachelor of Science degree.

Candidates for the Associate-in-Science Degree must complete the following course requirements. Elective courses should be chosen in keeping with the specific requirements of the institution to which the student plans to transfer and in keeping with the specific curriculum.

	Quarter Hours
<b>English</b> .....	15
110 (or 110a), 111, and 112 English Composition	(9)
and two (2) of the following:	
ENG 205, 206, 207, 208, 209, 210, 212, 213, 214, 215,	(6)
216, and 217.	
<b>Mathematics and Science</b> .....	46
*Math	(10)
Science	(12)
Math and/or Science Electives	(24)
<b>Behavioral Sciences and/or Humanities</b> .....	10
** <b>Physical Education (activity course)</b> .....	3
	<hr/>
Total General Requirements .....	73
<b>Electives</b> .....	22
	<hr/>
(Courses to be selected from Humanities, Mathematics, Science, Behavioral Sciences, and designated business offerings)	
<b>TOTAL REQUIRED</b> .....	96 hrs.

\* Minimum math requirement must be met with MATH 110 and MATH 120 or higher level math courses.

\*\* Physically disabled students or veterans of military service are exempted from the physical education requirements.

### Requirements for the Associate-in-General Education Degree

The Associate-in-General Education Degree is primarily designed to meet the needs of students who desire only two years of college. However, if a student should decide to continue his edu-

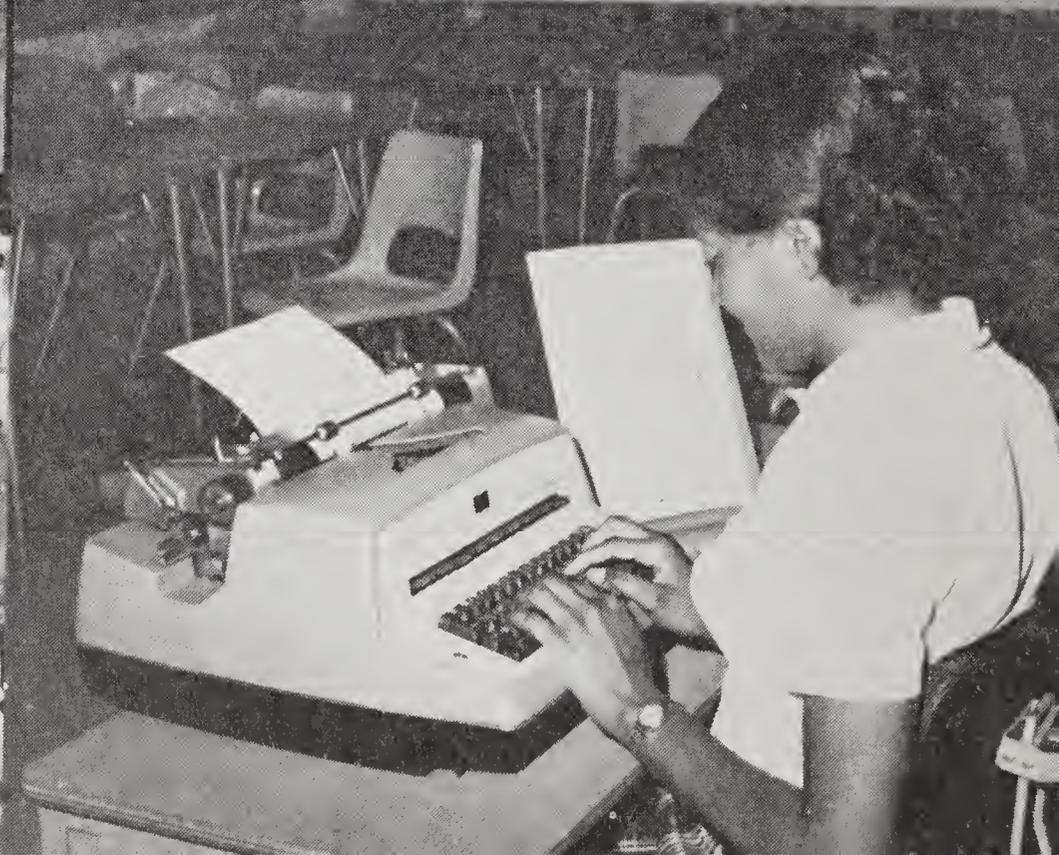
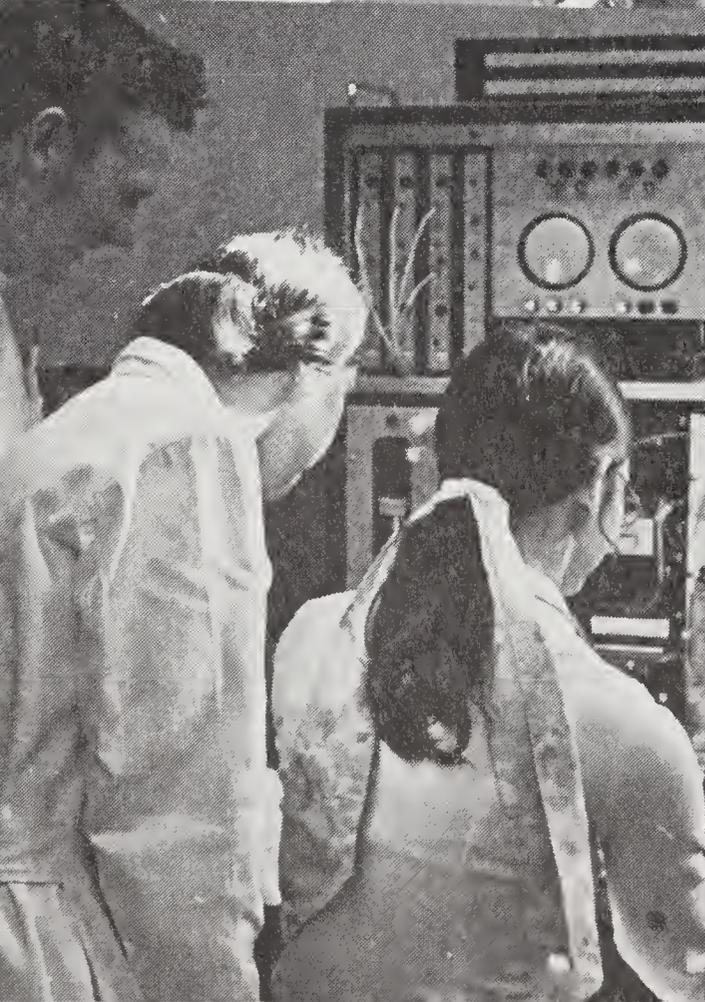
cation, many of the courses taken might be used for transfer credit at a senior institution. The acceptance of any particular course for transfer credit depends on the institution to which admission may be sought.

The Associate-in-General Education Degree requires a minimum of ninety-six (96) quarter hours in general education and interest type courses.

Courses for the Associate-in-General Education Degree should include **at least one course** from each of the disciplinary areas listed below. Beyond these basic requirements the student may elect general and/or specialty courses on the basis of his own interest.

Disciplinary Areas	Minimum Number of Courses Required
<b>English</b> (Composition or Literature) .....	1
<b>Behavioral Sciences</b> (includes economics, political science, psychology, and sociology) .....	1
<b>Humanities and English</b> (art, drama, foreign languages, history, music, philosophy, religion, or speech) .....	1
<b>Science or Mathematics</b> .....	1





# TECHNICAL PROGRAMS

Technological development has resulted in a new complexity and increased sophistication of jobs at all levels in business, industry, agriculture and public service. Teamwork is credited with making possible the technological progress and high level of productivity and efficiency achieved by industry in the past decade. Technicians and other semi-professional workers are the key members of these teams. Technician jobs are increasing at a faster rate than any other occupational group.

Sandhills Community College provides the opportunity for high school graduates to continue their education by taking a two year college level technician program. Broadly defined, technical occupations are those which require a high degree of specialized knowledge, a broad understanding of operational procedures and the ability to supervise the work of others. The technical programs at Sandhills Community College are designed to prepare students for employment in a number of basic jobs in an occupational field.

Upon successful completion of a technical program of study, the candidate is awarded an Associate in Applied Science degree.

## PROGRAMS OF STUDY

**Landscape Gardening**

**Accounting**

**Banking and Finance**

**Business Administration**

**One Year Business Administration Option**

**Electronic Data Processing—Business**

**General Office**

**One Year General Office Option**

**Secretarial**

**One Year Secretarial Option**

**Textile Management Technology**

**Architectural Engineering Technology**

**Civil Engineering Technology**

**Associate Degree Nursing**

**Medical Laboratory Technology**

**Human Resource Development**

**Journalism**

## **REQUIREMENTS FOR THE ASSOCIATE IN APPLIED SCIENCE DEGREE**

Students enrolled in technical programs, in order to receive the Associate in Applied Science Degree, must complete a minimum of ninety-six (96) quarter hours of work including the general education requirements or their equivalent and all other requirements of the curriculum in which the student is enrolled. See each technical curriculum for the minimum number of credits required. The student must complete a minimum of forty-five (45) quarter hours of work at Sandhills Community College, including the last fifteen (15) or more quarter hours, to be granted the Associate in Applied Science Degree.

Recognizing the importance of general education in all educational programs, Sandhills Community College provides each student with as much general education as is possible within the framework of his particular program. To this end, courses in English, the humanities and behavioral sciences are considered an integral part of each technical curriculum.

Associate in Applied Science Degree candidates must complete at least the following general education courses, or their equivalent, and all other requirements outlined in the curriculum the student is following. The student's cumulative grade point average must be 2.0 ("C" or better) on work completed at Sandhills.

English	9 quarter hours
Humanities	3-5 quarter hours (depending on program) (art appreciation, drama, foreign languages, history, literature, music appreciation, philosophy, religion or speech)
Behavioral Sciences	10-15 quarter hours (depending on program) (economics, government, psychology, sociology)

## **DESCRIPTIONS OF TECHNICAL PROGRAMS**

### **LANDSCAPE GARDENING**

The horticulture enterprise has experienced accelerated development in recent years. Expanding public and private building construction along with an increasing public emphasis on the use of plant materials for beautifying homes, commercial concerns, and public facilities has resulted in an unprecedented demand for ornamental plants.

The landscape gardening curriculum includes the study and practical application of many varied subjects in the field of horticulture. Landscape gardening consists of planting and growing plants, selecting plant material, arranging and planting materials in

the proper manner, and proper maintenance of the material that has been planted.

The two-year curriculum emphasizes practical field training. Students are assigned periodic intervals of management responsibility whereby the student resides in the living quarters of the horticulture building managing the greenhouses and other assigned student projects. Students are assigned gardening projects within the greenhouses, on the campus grounds, on golf courses, or other additional authorized field areas. The first spring and summer quarter includes practical field training by actual construction and management of various projects. During the spring quarter of the second year, students participate in "on-the-job" field experience.

The course of study in landscape gardening has been endorsed by the Professional Grounds Management Society. Students may elect to pursue a degree program or a certificate program.

**Certificate Program in Landscape Gardening.** The College attempts to meet the needs of those students who desire to study only one or more horticulture courses of the Landscape Gardening curriculum. Students who elect not to study for the associate in applied science degree in landscape gardening and choose to study only horticulture courses will be awarded a certificate for successfully completing each course.

**LANDSCAPE GARDENING  
Curriculum By Quarters**

(All courses not identified by the word "elective" are required for graduation.)

**FIRST YEAR**

		Course Class	Hours Per Week Lab.	Quarter Hours Credit
<b>FALL</b>				
ENG 101	Grammar and Composition I	3	0	3
BUS 130	Business Mathematics	5	0	5
BIO 120	Applied Botany	3	3	4
HOR 111	Principles of Horticulture	3	9	6
		—	—	—
		14	12	18
<b>WINTER</b>				
MAT 115	Practical Methods of Measurement	3	0	3
ENG 102	Grammar and Composition II	3	0	3
HOR 125	Arboriculture	3	3	4
HOR 126	Fertilizers	3	0	3
HOR 127	Greenhouse Operations	3	1	3
HOR 128	Soil Science	1	2	2
		—	—	—
		16	6	18

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>SPRING</b>				
CIV 110	Elementary Surveying	3	6	5
ENG 103	Report Writing	3	0	3
HOR 131	Plant Materials I	2	2	3
HOR 132	Plant Propagation I	3	3	4
HOR 133	Spring Gardening Laboratory	0	5	2
HOR 134	Resident Practicum I	0	12	1
HOR 135	Turfgrass Culture	3	3	4
		—	—	—
		14	31	22
<b>SUMMER</b>				
HOR 141	Landscape Design I	3	6	5
HOR 142	Pest Control	3	1	3
HOR 143	Plant Materials II	2	2	3
HOR 144	Resident Practicum II	0	12	1
HOR 145	Summer Gardening Laboratory	0	8	3
		—	—	—
		8	29	15
<b>SECOND YEAR</b>				
<b>FALL</b>				
SPH 101	Principles of Speech	5	0	5
HOR 211	Greenhouse Production I	3	4	4
HOR 212	Nursery Operations	3	4	4
HOR 213	Plant Propagation II	3	3	4
HOR 214	Plant Materials III	2	2	3
HOR 215	Resident Practicum III	0	12	1
		—	—	—
		16	25	21
<b>WINTER</b>				
PSY 220	Applied Psychology	5	0	5
HOR 220	Greenhouse Production II*	3	4	4
HOR 221	Grounds Maintenance*	4	2	5
HOR 222	Landscape Design II*	3	6	5
HOR 223	Plant Materials IV*	2	2	3
HOR 224	Seminar	3	0	3
HOR 229	Resident Practicum IV	0	12	1
	Elective (Humanities)	3	0	3
		—	—	—
		23*	26*	29*
<b>SPRING</b>				
HOR 231	Apprenticeship	0	40	4

\* Students must select 3 of the 4 courses to make a minimum total of 16 credit hours in landscape gardening.

**Total Required Minimum Quarter Hours: 122.**

**ACCOUNTING**

Because of the tremendous business and industrial expansion in all parts of the country, accounting is one of the fastest growing employment fields in America today.

The duties and responsibilities of an accountant vary somewhat in different firms. Some of the things an accountant might do are to record transactions, render periodic reports, maintain cost records, make special reports, complete tax returns, audit the books, and advise management in areas of financial affairs.

The graduates of the accounting curriculum may qualify for various jobs in business and industry leading to any of the following accounting positions: accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare them to become office managers, accounting supervisors, and to fill other responsible positions in a business firm.

**ACCOUNTING**

**Curriculum By Quarters**

(All courses listed below are required for graduation.)

	Course	Hours Per Week	Quarter
	Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>			
ENG 110	English Composition I	3	0 3
BUS 130	Business Mathematics	5	0 5
BUS 101	Introduction to Business	5	0 5
BUS 131	Principles of Accounting I	3	2 4
		—	—
		16	2 17
<b>SECOND QUARTER</b>			
ENG 111	English Composition II	3	0 3
BUS 132	Principles of Accounting II	3	2 4
ECO 201	Economics I	5	0 5
BUS 115	Business Law I	3	0 3
		—	—
		14	2 15
<b>THIRD QUARTER</b>			
ECO 202	Economics II	5	0 5
BUS 110	Office Machines I	2	2 3
BUS 133	Principles of Accounting III	3	2 4
BUS 116	Business Law II	3	0 3
BUS 102	Typewriting I*	3	2 4
		—	—
		16	6 19

\* A student who has previously passed a course in typewriting will not be required to take it again or to take an elective in its place.

		Course Hours Per Week		Quarter Hours Credit
		Class	Lab.	
<b>FOURTH QUARTER</b>				
BUS 229	Taxes	3	2	4
BUS 222	Intermediate Accounting I	3	2	4
EDP 104	Introduction to Data Processing Systems	3	2	4
	Elective (Behavioral Sciences or History)	5	0	5
		—	—	—
		14	6	17
<b>FIFTH QUARTER</b>				
BUS 220	Business Communication	5	0	5
BUS 223	Intermediate Accounting II	3	2	4
BUS 225	Cost Accounting	3	2	4
SPH 101	Principles of Speech	5	0	5
		—	—	—
		16	4	18
<b>SIXTH QUARTER</b>				
POL 201	or POL 202 Government	5	0	5
BUS 276	Money and Banking	5	0	5
BUS 269	Auditing	3	2	4
	Elective (Humanities)	3	0	3
		—	—	—
		16	2	17

**Total Required Minimum Quarter Hours: 99.**

## **BANKING AND FINANCE**

The Banking and Finance curriculum is designed primarily for bank employees who wish to upgrade their skills and advance their careers in the banking industry. The program also meets the educational needs for those who wish to enter banking jobs. The program is conducted in cooperation with local chapters of the American Institute of Banking. Students may enter upon the training program as part time or full time students.

## **BANKING AND FINANCE**

### **Curriculum By Quarters**

		Course Hours Per Week		Quarter Hours Credit
		Class	Lab.	
<b>FIRST QUARTER</b>				
ENG 110	English Composition I	3	0	3
BUS 130	Business Mathematics	5	0	5
BUS 131	Principles of Accounting I	3	2	4
ECO 201	Economics I	5	0	5
BUS 278	Principles of Bank Operation	4	0	4
		—	—	—
		20	2	21

		Course Hours Per Week		Quarter Hours Credit
		Class	Lab.	
<b>SECOND QUARTER</b>				
ENG 111	English Composition II	3	0	3
EDP 104	Introduction to Data Processing Systems	3	2	4
BUS 132	Principles of Accounting II	3	2	4
BUS 276	Money and Banking	5	0	5
BUS 150	Business Administration	4	0	4
		—	—	—
		18	4	20
<b>THIRD QUARTER</b>				
SPH 101	Principles of Speech	5	0	5
PSY 220	Applied Psychology	5	0	5
BUS 286	Planning Management Development	0	2	1
BUS 289	Saving, Time and Deposit Banking	4	0	4
BUS 281	Bank Management	4	0	4
		—	—	—
		18	2	19
<b>FOURTH QUARTER</b>				
SOC 201	Principles of Sociology	5	0	5
BUS 288	Credit Administration	4	0	4
BUS 282	Bank Letters and Reports	4	0	4
BUS 284	Conference Planning and Leadership	0	2	1
BUS 292	Loss Prevention	0	2	1
BUS 279	Bank Investments	4	0	4
		—	—	—
		17	4	19
<b>FIFTH QUARTER</b>				
BUS 291	Analyzing Financial Statements	4	0	4
BUS 115	Business Law I	3	0	3
BUS 285	Installment Credit	4	0	4
BUS 232	Sales Development	3	0	3
BUS 296	Bank Public Relations and Marketing	4	0	4
		—	—	—
		18	0	18
<b>SIXTH QUARTER</b>				
BUS 298	Supervision and Personnel Administration	4	0	4
BUS 287	Trust Functions	4	0	4
BUS 294	Home Mortgage Lending	4	0	4
BUS 293	Loan and Discount	3	0	3
BUS 280	Bank Management by Objectives	0	2	1
		—	—	—
		15	2	16

**BUSINESS ADMINISTRATION**

With the increasing population and industrial development in North Carolina, business has become more competitive and automated. Better opportunities in business will be filled by students

with specialized education beyond the high school level. The business administration curriculum is designed to prepare the student in many phases of administrative work encountered in the average business.

The graduate of the business administration curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in business such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist and travel industry; insurance; transportation; and communications.

### BUSINESS ADMINISTRATION (Required) Curriculum by Quarters

	Course Hours Per Week		Quarter Hours Credit
	Class	Lab.	
<b>FIRST QUARTER</b>			
ENG 110 English Composition I	3	0	3
BUS 130 Business Mathematics	5	0	5
BUS 101 Introduction to Business	5	0	5
BUS 131 Principles of Accounting I	3	2	4
	—	—	—
	<b>16</b>	<b>2</b>	<b>17</b>
<b>SECOND QUARTER</b>			
ENG 111 English Composition II	3	0	3
BUS 132 Principles of Accounting II	3	2	4
ECO 201 Economics I	5	0	5
BUS 115 Business Law I	3	0	3
BUS 102 Typewriting I*	3	2	4
	—	—	—
	<b>17</b>	<b>4</b>	<b>19</b>
<b>THIRD QUARTER</b>			
SPH 101 Principles of Speech	5	0	5
BUS 116 Business Law II	3	0	3
BUS 133 Principles of Accounting III	3	2	4
ECO 202 Economics II	5	0	5
	—	—	—
	<b>16</b>	<b>2</b>	<b>17</b>

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\* A student who has previously passed a course in typewriting will not be required to take it again or to take an elective in its place.

		Course Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>FOURTH QUARTER</b>					
BUS 229	Taxes	3	2	4	
BUS 232	Sales Development	3	0	3	
EDP 104	Introduction to Data Processing Systems	3	2	4	
	Elective	3	0	3	
		—	—	—	
		12	4	14	
<b>FIFTH QUARTER</b>					
BUS 220	Business Communication	5	0	5	
BUS 243	Advertising	3	2	4	
	Elective (Behavioral Science)	5	0	5	
BUS 110	Office Machines I	1	4	3	
		—	—	—	
		14	6	17	
<b>SIXTH QUARTER</b>					
BUS 276	Money and Banking	5	0	5	
BUS 235	Principles of Management	5	0	5	
BUS 239	Marketing	5	0	5	
	Elective (Humanities)	3	0	3	
		—	—	—	
		18	0	18	

Total Required Minimum Quarter Hours: 98.

### ONE YEAR BUSINESS ADMINISTRATION OPTION

The one year program in business administration is designed for students who wish to pursue a career in business and whose educational needs will be met in a one year training program. A certificate is awarded to students who complete the one year business administration program.

### ONE-YEAR BUSINESS ADMINISTRATION OPTION

#### Curriculum By Quarters

		Course Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>FIRST QUARTER</b>					
BUS 130	Business Mathematics	5	0	5	
BUS 101	Introduction to Business	5	0	5	
BUS 112	Filing	3	0	3	
BUS 102	Typing*	3	2	4	
		—	—	—	
		16	2	17	

\* A student who passes a proficiency test for Typewriting I will not be required to take the course; however, the hours must be made up in order to gain the 66 required minimum quarter hours.

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>SECOND QUARTER</b>				
ENG 140	Business English	3	0	3
BUS 103	Typewriting II	1	4	3
EDP 104	Introduction to Data Processing Systems	3	2	4
BUS 131	Accounting I	3	2	4
BUS 115	Law I	3	0	3
		—	—	—
		13	8	17
<b>THIRD QUARTER</b>				
BUS 116	Law II	3	0	3
BUS 132	Accounting II	3	2	4
SPH 101	Principles of Speech	5	0	5
ECO 201	Economics I	5	0	5
		—	—	—
		16	2	17
<b>FOURTH QUARTER</b>				
BUS 110	Office Machines	1	4	3
BUS 232	Sales	3	0	3
BUS 133	Accounting III	3	2	4
BUS 220	Business Communication	5	0	5
		—	—	—
		12	6	15

**Total Required Minimum Quarter Hours: 66.**

### **ELECTRONIC DATA PROCESSING**

Business data processing is a science dedicated to the solution of business related problems by automated means. This program is designed for the student who wishes to enter this field of occupation as a computer operator, computer programmer or systems analyst trainee. Training is given in the programming and operation of unit record equipment, including key-punch, sorter, reproducer-gang punch and accounting machine, as well as computer programming training. This provides the student with additional needed skills and background in basic decision making and solution planning as well as familiarity with other equipment still in use in computer installations.

The graduate of the business data processing program may qualify for employment in manufacturing and marketing industries, banks and other financial institutions, government agencies, communications industries, educational institutions and many others which make use of automated or electronic data processing equipment.

## ELECTRONIC DATA PROCESSING

### Required Curriculum by Quarters

	Course Hours Per Week		Quarter Hours Credit	
	Class	Lab.		
<b>FIRST QUARTER</b>				
EDP 104	Introduction to Data Processing Systems	3	2	4
EDP 101	Functional Wiring Principles	2	2	3
EDP 102	Compiler Language I	2	2	3
MAT 110	College Algebra	5	0	5
ENG 110	English Composition I	3	0	3
		15	6	18
<b>SECOND QUARTER</b>				
EDP 103	Compiler Language II	3	2	4
BUS 131	Principles of Accounting I	3	2	4
ENG 111	English Composition II	3	0	3
MAT 125	Statistics	3	0	3
		12	4	14
<b>THIRD QUARTER</b>				
EDP 106	Assembly Language	3	2	4
EDP 108	Systems and Procedures	3	0	3
BUS 132	Principles of Accounting II	3	2	4
SPH 101	Principles of Speech	5	0	5
		14	4	16
<b>FOURTH QUARTER</b>				
EDP 200	Computer Systems I	2	2	3
EDP 202	Data Processing Applications I	3	2	4
BUS 133	Principles of Accounting III	3	2	4
	Elective (Behavioral Sciences or History)	5	0	5
		13	6	16
<b>FIFTH QUARTER</b>				
EDP 201	Computer Systems II	2	2	3
EDP 203	Data Processing Applications II	3	2	4
	Elective (Business)	3	0	3
EDP 215	Computer Language Survey	2	2	3
	Elective (Behavioral Sciences or History)	5	0	5
		15	6	18
<b>SIXTH QUARTER</b>				
EDP 210	User Program Analysis	2	2	3
EDP 216	Data Processing Research Project	1	8	5
	Elective (Humanities)	3	0	3
BUS 235	Principles of Management	5	0	5
		11	10	16

Total Required Minimum Quarter Hours: 97.

## GENERAL OFFICE CURRICULUM

Many people are now employed in clerical occupations. Automation and increased production will mean that these people will need more technical skills and a greater adaptability for diversified types of jobs.

The general office curriculum offers specialized training in skill areas and is supplemented by related courses in mathematics, accounting, business law, insurance and sales.

The graduate of this curriculum may be employed as an administrative assistant, accounting clerk, assistant office manager, bookkeeper, file clerk, machine transcriptionist or a variety of other clerical-related jobs.

### GENERAL OFFICE Required Curriculum by Quarters

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
ENG 110	English Composition I	3	0	3
BUS 102	Typewriting I*	3	2	4
BUS 130	Business Mathematics	5	0	5
BUS 101	Introduction to Business	5	0	5
		—	—	—
		16	2	17
 <b>SECOND QUARTER</b>				
ENG 111	English Composition II	3	0	3
BUS 103	Typewriting II	1	4	3
BUS 110	Office Machines I	1	4	3
BUS 131	Principles of Accounting I	3	2	4
	Elective	3	0	3
		—	—	—
		11	10	16
 <b>THIRD QUARTER</b>				
ECO 201	Economics I	5	0	5
BUS 104	Typewriting III	1	4	3
BUS 212	Machine Transcription	1	4	3
BUS 132	Principles of Accounting II	3	2	4
	Elective	3	0	3
		—	—	—
		13	10	18

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\* A student passing the Typewriting I proficiency test will not be required to take an elective in its place.

		Course Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>FOURTH QUARTER</b>					
BUS 205	Advanced Typewriting	1	4	3	
SPH 101	Principles of Speech	5	0	5	
BUS 232	Sales Development	3	0	3	
EDP 104	Introduction to Data Processing Systems	3	2	4	
BUS 112	Filing	3	0	3	
		—	—	—	
		15	6	18	
<b>FIFTH QUARTER</b>					
BUS 220	Business Communication	5	0	5	
BUS 115	Business Law I	3	0	3	
	Elective (Humanities)	3	0	3	
	Elective	3	0	3	
		—	—	—	
		14	0	14	
<b>SIXTH QUARTER</b>					
BUS 213	Office Procedures	5	0	5	
BUS 233	Insurance	5	0	5	
BUS 235	Principles of Management	5	0	5	
BUS 116	Business Law II	3	0	3	
		—	—	—	
		18	0	18	

Total Required Minimum Quarter Hours: 97.

**ONE YEAR GENERAL OFFICE OPTION**

The one year general office curriculum is designed for students who wish to prepare for general office work and whose educational needs may be met in a one year training program. A certificate is awarded to students who complete the one year general office program.

**ONE YEAR GENERAL OFFICE OPTION**

**Required Curriculum by Quarters**

		Course Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>FIRST QUARTER</b>					
ENG 110	English Composition I	3	0	3	
BUS 102	Typewriting I*	3	2	4	
BUS 130	Business Mathematics	5	0	5	
BUS 101	Introduction to Business	5	0	5	
		—	—	—	
		16	2	17	

\* A student passing the Typewriting I proficiency test will not be required to take an elective in its place.

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>SECOND QUARTER</b>				
ENG 111	English Composition II	3	0	3
BUS 103	Typewriting II	1	4	3
BUS 110	Office Machines I	1	4	3
BUS 131	Principles of Accounting I	3	2	4
	Elective	3	0	3
		—	—	—
		<b>11</b>	<b>10</b>	<b>16</b>
<b>THIRD QUARTER</b>				
ECO 201	Economics I	5	0	5
BUS 104	Typewriting III	1	4	3
BUS 212	Machine Transcription	1	4	3
BUS 132	Principles of Accounting II	3	2	4
	Elective	3	0	3
		—	—	—
		<b>13</b>	<b>10</b>	<b>18</b>
<b>FOURTH QUARTER</b>				
BUS 205	Advanced Typewriting	1	4	3
SPH 101	Principles of Speech	5	0	5
EDP 104	Introduction to Data Proc. Systems	3	2	4
BUS 232	Sales	3	0	3
BUS 112	Filing	3	0	3
		—	—	—
		<b>15</b>	<b>6</b>	<b>18</b>
<b>FIFTH QUARTER</b>				
BUS 115	Business Law I	3	0	3
BUS 220	Business Communication	5	0	5
	Elective	3	0	3
	Elective (Humanities)	3	0	3
		—	—	—
		<b>14</b>	<b>0</b>	<b>14</b>
<b>SIXTH QUARTER</b>				
BUS 213	Office Procedures	5	0	5
BUS 233	Insurance	5	0	5
BUS 235	Principles of Management	5	0	5
BUS 116	Business Law II	3	0	3
		—	—	—
		<b>18</b>	<b>0</b>	<b>18</b>

**Total Required Minimum Quarter Hours: 97**

### **SECRETARIAL**

The demand for better qualified secretaries in business and in the professions is becoming more acute. The purpose of this curriculum is to provide a program that will give specialized training in the accepted procedures required by business.

The secretarial curriculum is designed to offer students the necessary skills in typing, dictation, transcription, and terminology for employment in their chosen occupation. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and inter-personal relationships.

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

### SECRETARIAL Curriculum by Quarters

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
BUS 130	Business Mathematics	5	0	5
BUS 101	Introduction to Business	5	0	5
BUS 106	Shorthand I*	3	2	4
BUS 102	Typewriting I*	3	2	4
		—	—	—
		16	4	18
<b>SECOND QUARTER</b>				
ENG 110	English Composition I	3	0	3
BUS 103	Typewriting II	1	4	3
BUS 107	Shorthand II	3	2	4
BUS 131	Principles of Accounting I	3	2	4
BUS 115	Business Law I	3	0	3
		—	—	—
		13	8	17
<b>THIRD QUARTER</b>				
BUS 104	Typewriting III	1	4	3
BUS 108	Shorthand III	3	2	4
BUS 132	Principles of Accounting II	3	2	4
BUS 110	Office Machines I	1	4	3
ENG 111	English Composition II	3	0	3
		—	—	—
		11	12	17

\* If a student passes the proficiency test in both Typewriting I and Shorthand I, he must take one elective. However, should he pass only one of these, an elective will not be required.

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FOURTH QUARTER</b>				
BUS 206	Dictation and Transcription I	3	2	4
BUS 205	Advanced Typewriting	1	4	3
EDP 104	Introduction to Data Processing Systems	3	2	4
BUS 112	Filing	3	0	3
	Elective	3	0	3
		—	—	—
		13	8	17
<b>FIFTH QUARTER</b>				
BUS 220	Business Communication	5	0	5
BUS 207	Dictation and Transcription II	3	2	4
ECO 201	Economics I	5	0	5
	Elective (Humanities)	3	0	3
		—	—	—
		16	2	17
<b>SIXTH QUARTER</b>				
BUS 212	Machine Transcription	1	4	3
BUS 213	Office Procedures	5	0	5
SPH 101	Principles of Speech	5	0	5
	Elective (Behavioral Sciences or History)	5	0	5
		—	—	—
		16	4	18

**Total Required Minimum Quarter Hours: 100.**

### **ONE-YEAR SECRETARIAL OPTION**

The one-year curriculum is designed for the student who wishes to pursue a career in business but does not wish to follow the route of the two-year secretarial science major. This program is planned to meet the needs of men and women wishing to take a concentrated one-year secretarial preparatory program for office work today. A certificate is awarded to students who complete the one-year secretarial program.

### **ONE-YEAR SECRETARIAL OPTION**

#### **Curriculum by Quarters**

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
BUS 112	Filing	3	0	3
BUS 101	Introduction to Business	5	0	5
BUS 106	Shorthand I*	3	2	4
BUS 102	Typewriting I*	3	2	4
		—	—	—
		14	4	16

\* A student who passes a proficiency test in Typewriting or Shorthand will not be required to take the course. However, the hours must be made up in other courses in order to gain the required minimum quarter hours.

		Course Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>SECOND QUARTER</b>					
ENG 140	Business English	3	0	3	
BUS 103	Typewriting II	1	4	3	
BUS 107	Shorthand II	3	2	4	
BUS 131	Principles of Accounting I	3	2	4	
BUS 110	Office Machines I	1	4	3	
		—	—	—	
		11	12	17	

<b>THIRD QUARTER</b>					
BUS 104	Typewriting III	1	4	3	
BUS 108	Shorthand III	3	2	4	
BUS 130	Business Mathematics	5	0	5	
SPH 101	Principles of Speech	5	0	5	
		—	—	—	
		14	6	17	

<b>FOURTH QUARTER</b>					
BUS 206	Dict. & Trans. I	3	2	4	
BUS 205	Advanced Typewriting				
	or	1	4	3	
BUS 212	Machine Transcription				
BUS 213	Office Procedures	5	0	5	
BUS 220	Business Communications	5	0	5	
		—	—	—	
		14	6	17	

Total Required Minimum Quarter Hours: 67.

### TEXTILE MANAGEMENT TECHNOLOGY

The objective of the curriculum is to train line personnel or workers in the textile industry to become line managers, foremen, floor supervisors, or shift supervisors, thereby providing (1) job advancement opportunities for textile workers and (2) a supply of paraprofessional managers needed by textile companies.

The main target group is employed textile workers who will enroll in courses required in the program and complete the program over a period of several years. Also built into the strategy for serving textile workers and textile industry needs is the idea that some students would not necessarily be expected to complete all courses in the program. The personnel director of the plant may decide that 10 particular courses rather than all the courses will be sufficient to meet the training needs of a worker to become a line manager.

The program is designed also for the full-time student who needs management training in order to enter managerial work in the textile industry.

Location of Courses	Curriculum Blocks	Quarter Credit Hours
<b>Sandhills Comm. Coll. Textile Technology (N.C.S.U. Courses)</b>		
<b>Number</b>	<b>Course</b>	
TEX 101 (T-101)	Fundamentals of Textiles	3
TEX 202 (TC-203)	Fiber Science I	3
TEX 203 (TX-330)	Testing & Quality Control	4
TEX 204 (TX-220)	Yarn Forming Systems	4
TEX 205 (TX-250)	Fabric Forming Systems	4
TEX 206 (TX-211)	Fiber Science II	3
TEX 207 (TC-301)	Dyeing & Finishing	4
	<b>Total</b>	<b>25 Hours</b>
<b>In Plant Textile Management Development</b>		
MGT-100	Introduction to Supervisory Practices	3
MGT-110	Fundamentals of Management	4
MGT-111	Industrial First Aid & Safety	1
MGT-112	Industrial Economics	1
MGT 113	Basic Human Relations	1
MGT-200	Advanced Management Techniques	3
MGT-201	Industrial Communications	2
MGT-202	Labor Law	2
MGT-203	Modern Methods of Industrial Training	2
MGT-300	Advanced Studies in Human Relations	4
MGT-301	Principles of Industrial Engineering	4
MGT-302	Employee Evaluation & Interviewing	1
MGT-303	Management by Objectives	1
MGT-304	Supervising the Disadvantaged	1
	<b>Total</b>	<b>30 Hours</b>
<b>Sandhills Comm. Coll. General (Core)</b>		
RDG 100	Reading	3
BUS 101	Introduction to Business	5
BUS 130	Business Math	5
ENG 101	Grammar & Composition I	3
ENG 102	Grammar & Composition II	3
ENG 103	Report Writing	3
ECO 201	Economics I	5
BUS 235	Principles of Management	5
PSY 220	Applied Psychology	5
SOC 201	Principles of Sociology	5
	Humanities Elective	3
	Electives	3-12
	<b>Total</b>	<b>48-55 Hours</b>

**ARCHITECTURAL ENGINEERING TECHNOLOGY**

This curriculum is designed to provide technically trained personnel for the building construction industry and its interrelated fields of architecture and engineering. The program will develop an understanding of the planning, design and erection of buildings and the relationships of the owner, architect, engineer, contractors, municipalities and government agencies in the work.

The graduating technician would have job opportunities in architecture, engineering, building construction, and government planning and inspection. Typical jobs available include architectural draftsman, construction inspector, estimator, project coordinator and assistant superintendent of construction. Various construction sales and project planning job opportunities also exist.

The graduate employed in an architect's office might be involved in drawing complete and accurate plans and details from the architect's sketches. He might prepare floor plans, elevation drawings, construction details, door, window and room schedules and site plans. Graduates employed by building construction contractors would be competent in estimating, field inspection, collecting site data, and in interpretation of working drawings for construction personnel.

**ARCHITECTURAL ENGINEERING TECHNOLOGY**

**Curriculum by Quarters**

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
ENG 101	Grammar & Composition I	3	0	3
MAT 131	Technical Mathematics I	5	0	5
DFT 101	Technical Drafting I	2	6	4
CIV 101	Surveying I	2	6	4
	Elective (Behavioral Science/History)	5	0	5
		—	—	—
		17	12	21
<b>SECOND QUARTER</b>				
ENG 102	Grammar & Composition II	3	0	3
MAT 132	Technical Mathematics II	5	0	5
DFT 102	Technical Drafting II	2	6	4
PHY 201	General Physics I	4	2	4
CIV 114	Statics	3	3	4
		—	—	—
		17	11	20

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>THIRD QUARTER</b>				
MAT 133	Technical Mathematics III	5	0	5
PHY 202	General Physics II	4	2	4
DFT 108	Architectural Drafting I	2	6	4
CIV 221	Strength of Materials & Properties of Engineering Materials	3	3	4
ENG 103	Report Writing	3	0	3
		—	—	—
		17	11	20
<b>FOURTH QUARTER</b>				
CIV 240	Co-op Summer Work	0	40	4
<b>FIFTH QUARTER</b>				
CIV 217	Construction Methods & Equipment	3	3	4
CIV 105	Architectural Materials & Methods	3	3	4
CIV 219	Plain Concrete and Asphalt	3	3	4
PHY 203	General Physics III	4	2	4
DFT 210	Architectural Design	3	0	3
		—	—	—
		16	11	19
<b>SIXTH QUARTER</b>				
CIV 220	Construction Planning	2	3	3
CIV 223	Codes, Contracts & Specifications	2	0	2
CIV 222	Structures I	3	0	3
DFT 220	Architectural Drafting II	2	6	4
CIV 226	Architectural Mechanical Equipment	3	0	3
	Elective (Humanities)	3	0	3
		—	—	—
		15	9	18
<b>SEVENTH QUARTER</b>				
CIV 224	Structures II	3	0	3
DFT 237	Construction Estimating	3	6	5
	Elective (Behavioral Sciences/History)	5	0	5
CIV 111	Site Surveying	1	6	3
DFT 222	Architectural Drafting III	2	6	4
		—	—	—
		14	18	20

**Total Required Minimum Quarter Hours: 122.**

NOTE: 10 hours of open lab time is available each week for students who require any special assistance in class work.

### **CIVIL ENGINEERING TECHNOLOGY**

The purpose of this curriculum is to train the technician to perform many of the planning and supervisory tasks necessary in the construction of commercial and industrial buildings, residential construction, highways, bridges, power plants, dams, airfields,

water and sewage treatment plants, industrial buildings and utilities. The expanding highway and construction industries need up-to-date technically trained personnel.

The curriculum is designed to train technicians who will work with skilled craftsmen and engineers in performing the various functions included in the broad field of construction. The graduate might be employed as an instrument man or as a supervisory inspector. He would be equipped with the knowledge and ability to permit rapid advancement to party chief, chief inspector, estimator, material tester, or construction equipment and materials salesman.

Initial employment possibilities exist in the State Highway Commission, city and county engineering departments, private civil engineers, engineering offices, and contractors in many fields of industry. Overseas employment opportunities, at unusually high salaries, are available for technicians equipped with these skills.

**CIVIL ENGINEERING TECHNOLOGY**  
**Curriculum by Quarters**

	Course Hours Per Week		Quarter Hours Credit	
	Class	Lab.		
<b>FIRST QUARTER</b>				
ENG 101	Grammar & Composition I	3	0	3
MAT 131	Technical Mathematics I	5	0	5
DFT 101	Technical Drafting I	2	6	4
CIV 101	Surveying I	2	6	4
	Elective (Behavioral Science/History)	5	0	5
		—	—	—
		17	12	21
<b>SECOND QUARTER</b>				
ENG 102	Grammar & Composition II	3	0	3
MAT 132	Technical Mathematics II	5	0	5
DFT 102	Technical Drafting II	2	6	4
PHY 201	General Physics I	4	2	4
CIV 114	Statics	3	3	4
		—	—	—
		17	11	20
<b>THIRD QUARTER</b>				
MAT 133	Technical Mathematics III	5	0	5
PHY 202	General Physics II	4	2	4
CIV 102	Surveying II	2	6	4
CIV 221	Strength of Materials, Properties of Engineering Materials	3	3	4
ENG 103	Report Writing	3	0	3
		—	—	—
		17	11	20
<b>FOURTH QUARTER</b>				
CIV 240	Co-op Summer Work	0	40	4

			Course Hours Per Week		Quarter
			Class	Lab.	Hours Credit
<b>FIFTH QUARTER</b>					
CIV 217	Construction Methods & Equipment		3	3	4
CIV 105	Architectural Materials & Methods		3	3	4
CIV 219	Plain Concrete and Asphalt		3	3	4
PHY 203	General Physics III		4	2	4
CIV 103	Surveying III		2	6	4
			—	—	—
			15	17	20
<b>SIXTH QUARTER</b>					
CIV 202	Properties of Soils		3	3	4
CIV 220	Construction Planning		2	3	3
CIV 223	Codes, Contracts & Specifications		2	0	2
CIV 222	Structures I		3	0	3
CIV 226	Architectural Mechanical Equipment		3	0	3
	Elective (Humanities)		3	0	3
			—	—	—
			16	6	18
<b>SEVENTH QUARTER</b>					
CIV 224	Structures II		3	0	3
DFT 237	Construction Estimating		3	6	5
	Elective (Behavioral Science/History)		5	0	5
CIV 227	Construction of Roads & Pavements		3	2	4
			—	—	—
			14	8	17

NOTE: 10 hours of open lab time is available each week for students who require any special assistance in class work.

**Total Required Minimum Quarter Hours: 120.**

### **ASSOCIATE DEGREE NURSING**

The great increase in knowledge affecting health practices, the population growth, and the public demand for more health care are the basis of statistics documenting the ever-increasing need for nursing personnel.

The program at Sandhills Community College combines a curriculum of nursing education and general education on the campus with selected learning experiences at hospitals, doctors' offices, and other community health agencies under the direction of the College nursing faculty. The curriculum provides preparation for technical nursing. Graduates will be qualified to write the Registered Nurse examination in North Carolina. The curriculum prepares the graduates to give direct patient-centered nursing care under the supervision of a professional registered nurse as beginning level practitioners.

The program encourages the students to progress to their full-est potentials as individuals, nurses, and citizens of their commu-nities.

The associate in applied science degree nursing program at Sandhills has received Accreditation from the National League for Nursing and is accredited by the North Carolina State Board of Nursing.

**ASSOCIATE DEGREE NURSING**  
**Curriculum by Quarters**

	Course Hours Per Week		Quarter Hours Credit	
	Class	Lab.		
<b>FALL QUARTER (FIRST YEAR)</b>				
NUR 110	Introduction to Nursing	2	0	2
NUR 111	Introduction to Pharmacology	2	0	2
NUR 112	Basic Principles of Patient Care	0	6	2
RDG 100	Reading*	3	0	3
BIO 210	Human Anatomy and Physiology I	4	3	5
PSY 201	Principles of Psychology	5	0	5
		—	—	—
		16	9	19
<b>WINTER QUARTER</b>				
NUR 113	Nutrition	2	0	2
NUR 114	Nursing Intervention in the Maternity or Cycle	5	6	7
NUR 115	Psychiatric Nursing			
BIO 211	Human Anatomy and Physiology II	4	3	5
PSY 202	Developmental Psychology	5	0	5
or				
SOC 201	Principles of Sociology			
		—	—	—
		16	9	19
<b>SPRING QUARTER</b>				
NUR 114	Nursing Intervention in the Maternity or Cycle	5	6	7
NUR 115	Psychiatric Nursing			
PSY 202	Developmental Psychology	5	0	5
or				
SOC 201	Principles of Sociology			
BIO 230	Microbiology	4	3	5
		—	—	—
		14	9	17

\* Dependent upon the result of a reading test, a student may elect to substitute an elective for Reading 100. Eight hours of free electives are required for graduation; three of these hours must be humanities. If Reading 100 is taken, it will count as 3 hours of electives.

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>SUMMER QUARTER</b>				
NUR 116	Nursing of Children	5	6	7
or				
NUR 117	Basic Nursing to People	6	9	9
ENG 110	English Composition I	3	0	3
ENG 111	English Composition II	3	0	3
		11-12	6-9	13-15
<b>FALL QUARTER (SECOND YEAR)</b>				
NUR 116	Nursing of Children	5	6	7
or				
NUR 117	Basic Nursing to People	6	9	9
ENG 112	English Composition III	3	0	3
	Electives	5	0	5
		13-14	6-9	15-17
<b>WINTER QUARTER</b>				
NUR 118	Advanced Nursing to People	6	12	10
NUR 120	Team Nursing	1	6	3
	Elective	3	0	3
		10	18	16
<b>SPRING QUARTER</b>				
NUR 119	Nursing Intervention in Maternal-Child Critical Situations	6	12	10
NUR 121	Emergency Nursing Care	1	6	3
		7	18	13
General Education Courses		47 Hours		
Nursing Education Courses		64 Hours		
		111		
<b>Total Required Quarter Hours</b>		<b>111</b>		

The college reserves the right to revise this curriculum in keeping with evolving trends in associate degree nursing education.

### MEDICAL LABORATORY TECHNOLOGY

The basic ingredient of the medical laboratory is trained personnel, and the availability of well qualified personnel is an essential prerequisite to providing adequate medical laboratory care to individuals, families, and communities of North Carolina and the nation. In recent times this basic ingredient has been in short supply. As the modern medical laboratory contributes more and more to the detection and management of disease, the need for trained laboratory personnel will grow.

The medical laboratory technology program at Sandhills Community College is a two year associate degree program which combines general education courses on campus with medical laboratory

courses and clinical training at Moore Memorial Hospital or other suitable clinical facilities.

The medical laboratory technician is trained to perform a wide variety of procedures ranging from collecting blood specimens to analyzing the chemical and biological constituents of body fluids. A skilled technician uses a wide array of precision instruments including automatic analyzers, microscopes, electronic counters, and spectrophotometers.

The program prepares the graduate to assume an important responsibility in the medical laboratory working under the supervision of medical technologists and pathologists.

### MEDICAL LABORATORY TECHNOLOGY Curriculum by Quarters

		Course Hours	Per Week	Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
MLT 100	Introduction to Medical Laboratory Technique I	2	0	2
CHM 110	General Chemistry I	3	0	3
CHM 110L	General Chemistry I Lab	0	3	1
BIO 210	Human Anatomy and Physiology I	4	3	5
PSY 201	Principles of Psychology	5	0	5
ENG 110	English Composition I	3	0	3
		17	6	19
<b>SECOND QUARTER</b>				
MLT 111	Introduction to Medical Laboratory Technique II	2	2	2
ENG 111	English Composition II	3	0	3
CHM 111	General Chemistry II	3	0	3
CHM 111L	General Chemistry II Lab	0	3	1
BIO 211	Human Anatomy and Physiology II	4	3	5
PSY 220	Developmental Psychology	5	0	5
		17	8	19
<b>THIRD QUARTER</b>				
MLT 112	Medical Laboratory Instrumentation	2	3	3
CHM 112	General Chemistry III	3	0	3
CHM 112L	General Chemistry III Lab	0	3	1
BIO 230	Microbiology	4	3	5
	Elective (Humanities)	3-5	0	3-5
		12-14	9	15-17
<b>FOURTH QUARTER</b>				
MLT 201	Hematology and Urinalysis	3	0	3
MLT 211	Laboratory Principles I	2	34	9
		5	34	12

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIFTH QUARTER</b>				
MLT 202	Clinical Chemistry	3	0	3
MLT 212	Laboratory Principles II	2	34	9
		—	—	—
		5	34	12
<b>SIXTH QUARTER</b>				
MLT 203	Medical Microbiology	3	0	3
MLT 213	Laboratory Principles III	2	34	9
		—	—	—
		5	34	12
<b>SEVENTH QUARTER</b>				
MLT 204	Serology, Electrocardiogram, and Blood Bank	3	0	3
MLT 214	Laboratory Principles IV	2	34	9
		—	—	—
		5	34	12
General Education Courses		46-49 hours		
Medical Laboratory Technician Courses		55 hours		

Total Required Minimum Quarter Hours: 101-103

## HUMAN RESOURCE DEVELOPMENT

Given the current and projected availability of educated workers, human service agencies cannot meet adequately the needs of the public for health, education and welfare services. Mental health centers, public schools, correctional institutions, law enforcement agencies, health departments, social service agencies and other helping institutions need technically trained personnel to assist human service professionals and to help members of the public make good use of provided services.

The human resource development curriculum is flexible yet provides some specialization for students in the second year. The curriculum includes a basic educational program for students who want to work in middle-level management in human service agencies.

## HUMAN RESOURCE DEVELOPMENT

### Curriculum by Quarters

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
HRD 101	Social & Group Processes I	1	3	2
PSY 201	Principles of Psychology	5	0	5
HRD 100	Intro. to Human Resource Development	4	3	5
SOC 201	Principles of Sociology	5	0	5
		—	—	—
		15	6	17

	Course Class	Hours Per Week Lab.	Quarter Hours Credit
<b>SECOND QUARTER</b>			
HRD 102	Social & Group Processes II	1 3	2
PSY 202	Developmental Psychology	5 0	5
PSY 212	Behavior Modification	2 3	3
SOC 213	Social Agency Interviewing	3 3	4
ENG 110	English Composition I	3 0	3
	—	—	—
	14	9	17
<b>THIRD QUARTER</b>			
HRD 103	Social & Group Processes III	1 3	2
SOC 212	Sociology of the Family	4 3	5
SOC 203	Social Problems	4 3	5
PSY 203	Behavior Disorders I	2 3	3
PSY 210	Intro. to Counseling	3 0	3
	—	—	—
	14	12	18
<b>FOURTH QUARTER</b>			
SOC 204	Community Organization, Conflict & Change	4 3	5
PSY 209	Intro. to Study of Exceptional Children	3 3	4
	—	—	—
	7	6	9
<b>FIFTH QUARTER</b>			
PSY 204	Behavior Disorders II	4 0	4
PSY 207	Intro. to Psychological Testing	4 3	5
PSY 206	Intro. to Personality	5 0	5
ENG 111	English Composition II	3 0	3
HRD 251	Field Placement I	0 3	1
	—	—	—
	16	6	18
<b>SIXTH QUARTER</b>			
HRD 205	Internship in Human Resource Development	0 40	6
<b>SEVENTH QUARTER</b>			
HRD 206	Human Resources Seminar	3 0	3
HRD 207	Area of Specialization	1 6	3
SPH 101	Principles of Speech	5 0	5
HRD 252	Field Placement II	0 3	1
	Electives	6 0	6
	—	—	—
	15	9	18

**Total Required Minimum Quarter Hours: 103.**

### JOURNALISM

The purpose of the two-year journalism program is to prepare students to work for daily or weekly newspapers or industrial house organs as reporters, lay-out and composing room managers, news-

writers, feature, column, and editorial writers and photographers. Graduates can also work for AM and FM radio stations as broadcasters, news editors, reporters, and writers.

During the first year of study, students will develop the basic journalistic skills of composition, research, typing, reporting, news-writing, photography, and speech communication. They will also be introduced to the complexities of mass media and the effects created by mass communication.

The second year of study will be devoted to the specific skills needed to write, edit, and lay out a newspaper for publication or to the specific skills needed to write, edit, and broadcast for radio. More extensive study in politics, government, sociology, psychology, economics and literature will be required, providing a background from which to compose in-depth news stories, features, and editorials.

The students will spend their last quarter of study in an actual work situation with a newspaper or radio station. They will be supervised in this experience by a faculty member, returning to the campus weekly for a seminar discussion related to their work.

## JOURNALISM

### Curriculum by Quarters

	Course Hours Per Week		Quarter Hours Credit	
	Class	Lab.		
<b>FIRST QUARTER</b>				
JOU 110	Introduction to Mass Communications	3	0	3
ENG 110	English Composition I	3	0	3
HIS 151	U. S. History I	5	0	5
BUS 102	Typewriting I	3	2	4
		—	—	—
		14	2	15
<b>SECOND QUARTER</b>				
JOU 111	Reporting and Newswriting I	3	0	3
ENG 111	English Composition II	3	0	3
HIS 152	U. S. History II	5	0	5
BUS 103	Typewriting II	1	4	3
		—	—	—
		12	4	14
<b>THIRD QUARTER</b>				
JOU 112	Reporting and Newswriting II	3	0	3
ENG 112	English Composition III	3	0	3
BUS 104	Typewriting III	1	4	3
PHO 110	Photography	3	3	4
or				
SPH 101	Principles of Speech	5	0	5
		—	—	—
		10-12	7-4	13-14

**FOURTH QUARTER**

JOU 201	Makeup, Editing Copy and Proof	3	0	3
POL 201	The American Political System	5	0	5
	Elective (Humanities)	3	0	3
SPH 101	Principles of Speech	5	0	5
or				
JOU 210	Broadcasting I	3	0	3
		14-16	0	14-16

**FIFTH QUARTER**

JOU 202	Feature Writing	3	0	3
SOC 201	Principles of Sociology	5	0	5
POL 202	State and Local Political Systems in the American Political System	5	0	5
	Elective (Humanities)	3	0	3
or				
JOU 211	Broadcasting II			
		13	0	13

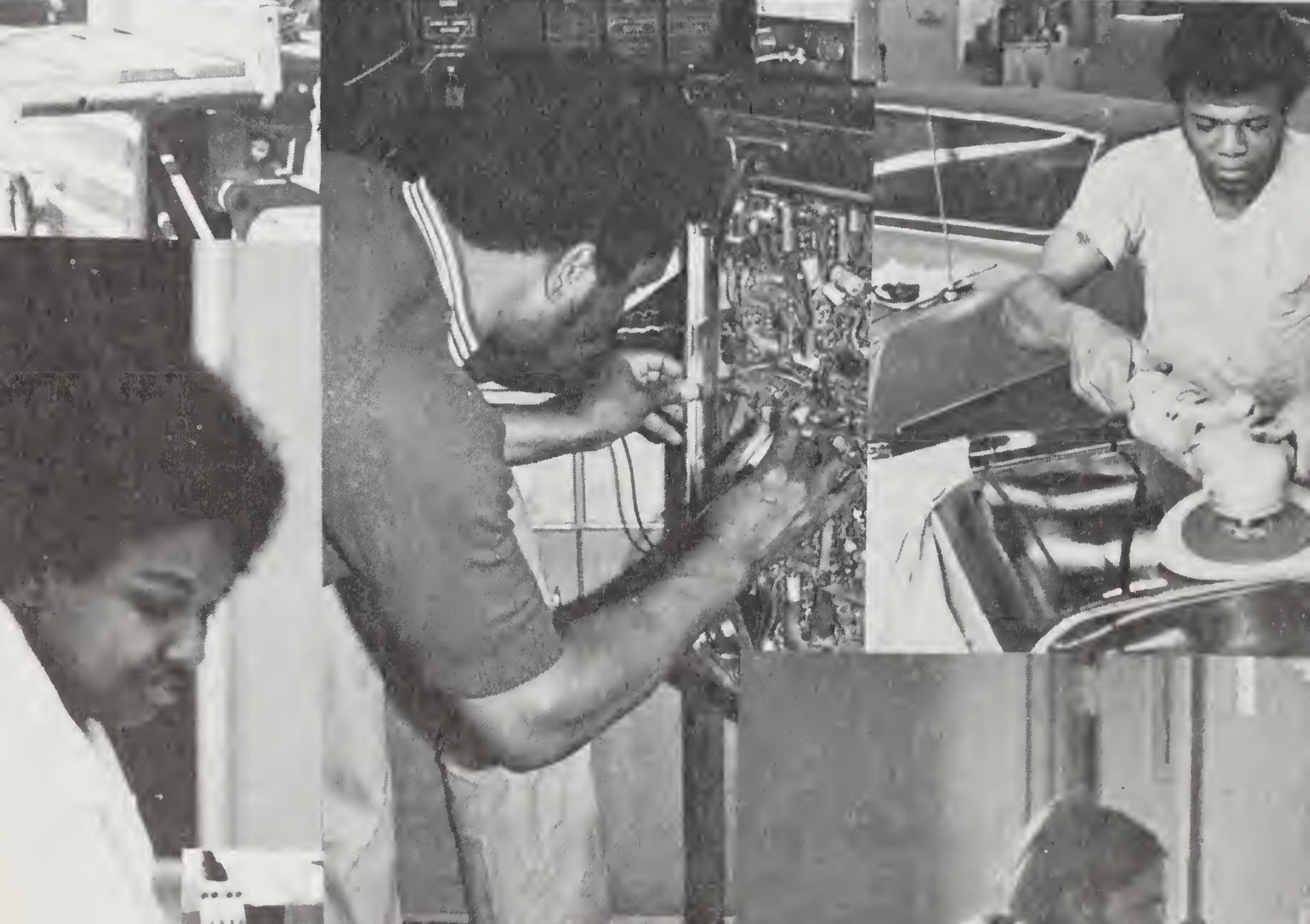
**SIXTH QUARTER**

JOU 203	Editorial and Column Writing	3	0	3
or				
JOU 212	Broadcasting III	5	0	5
ECO 201	Economics I	5	0	5
SOC 203	Social Problems	5	0	5
or				
PSY 201	Principles of Psychology			
		13	0	13

**SEVENTH QUARTER**

JOU 204	Supervised Work Experience	0	30	10
JOU 205	Journalism Seminar	2	0	2
		2	30	12

**Total Required Minimum Quarter Hours: 98-99.**



# VOCATIONAL PROGRAMS

The objectives of the vocational programs at Sandhills Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading of skills and knowledge, to develop an understanding of the American free enterprise system and to develop an interest in the betterment of our society.

Vocational programs usually require one or two full years of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

The vocational programs are designed to prepare the graduate to enter and make progress in a skilled occupation. Up-to-date instructional equipment is used in classroom, laboratory, and shop activities. Included in the programs of study is instruction in related and applied general education subjects with a concentration of study in technical subjects and the development of manipulative skill.

Transfer students from other post-secondary institutions may be placed in a vocational curriculum with advanced standing. A high school graduate with prior study in a vocational curriculum may also be placed in a vocational curriculum with advanced standing by passing competency examinations.

## **Programs of Study**

The diploma is granted upon successful completion of one of the following programs:

- Automobile Body Repair
- Automobile Mechanics
- Carpentry
- Electronics Servicing
- Radio and Television Repair
- Practical Nurse Education

## **REQUIREMENTS FOR THE DIPLOMA**

A candidate for the diploma must successfully complete at least fifteen (15) quarter hours of general education courses or the equivalent, and all other requirements in the curriculum in which he is enrolled. A minimum of thirty (30) quarter hours of work must be completed at this institution.

## DESCRIPTIONS OF VOCATIONAL PROGRAMS

### Automobile Body Repair

The field of automotive body repair and painting needs many more well-trained people to meet the growing employment demand. In this program, much of the student's time in the shop is devoted to learning skills and practicing these skills on wrecked cars. Every attempt is made to relate the practical experience to actual on-the-job situations. Shop experiences will include straightening damaged parts, replacing panels, aligning body parts, unitized body repair, glass and trim work, inspecting and straightening frames, metal preparation and painting. The student also studies management principles, including estimating, as they apply to efficient operation of a body shop. General education courses are taught as they apply to this occupation.

### AUTOMOBILE BODY REPAIR Curriculum by Quarters

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>FIRST QUARTER</b>				
AUT 1111	Auto Body Repair I	5	12	9
PHY 1101	Applied Science I	3	2	4
MAT 1101	Fundamentals of Mathematics	5	0	5
WLD 1101	Basic Gas Welding	1	2	2
		—	—	—
		14	16	20
<b>SECOND QUARTER</b>				
AUT 1112	Auto Body Repair II	5	12	9
MAT 1120	Applied Mathematics II	3	0	3
BUS 1103	Small Business Operations I	3	0	3
RDG 100	Reading	3	0	3
WLD 1105	Auto Body Welding	1	3	2
		—	—	—
		15	15	20
<b>THIRD QUARTER</b>				
AUT 1113	Metal Finishing and Painting	5	15	10
BUS 1104	Small Business Operations II	2	2	3
ENG 1104	Effective Communications	3	0	3
PSY 1101	Human Relations	3	0	3
		—	—	—
		13	17	19
<b>FOURTH QUARTER</b>				
AUT 1114	Body Shop Applications	3	19	9
AUT 1109	Basic Automotive Air Conditioning	2	2	3
AUT 1110	Automotive Front Suspension	2	2	3
		—	—	—
		7	23	15

**Automobile Mechanics**

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Because complexity in automotive vehicles increases each year owing to scientific discovery and new engineering, this curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repairing.

Automotive 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.

**AUTOMOBILE MECHANICS  
Curriculum by Quarters**

<b>FIRST QUARTER</b>			
		Course Hours Per Week	Quarter
		Class	Hours Credit
		Lab.	
AUT 1103	Engine Electrical Systems	3	9 6
AUT 1104	Engine Fuel Systems	3	7 5
PHY 1101	Applied Science I	3	2 4
DFT 1101	Schematics and Diagrams: Power Mechanics	0	3 1
		—	—
		9	21 16
<b>SECOND QUARTER</b>			
AUT 1101	Internal Combustion Engines	3	9 6
AUT 1102	Auto Chassis and Suspension Systems	3	9 6
RDG 100	Reading	3	0 3
WLD 1101	Basic Gas Welding	0	3 1
		—	—
		9	21 16

		Course Hours Per Week		Quarter
		Class	Lab.	Hours Credit
<b>THIRD QUARTER</b>				
AUT 1106	Automotive Air Conditioning	3	9	6
AUT 1107	Braking Systems	3	9	6
WLD 1102	Gas Arc Welding	0	3	1
ENG 1104	Effective Communications II	3	0	3
		—	—	—
		9	21	16
<b>FOURTH QUARTER</b>				
AUT 1150	Co-op Summer Work	0	40	4
<b>FIFTH QUARTER</b>				
AUT 1201	Automotive Power Train Systems	2	8	5
AUT 1202	Automotive Servicing I	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
		—	—	—
		10	20	17
<b>SIXTH QUARTER</b>				
AUT 1203	Automotive Emission Controls	3	3	4
AUT 1204	Automotive Engine Tune-Up	3	9	6
BUS 1103	Small Business Operations I	3	0	3
MAT 1120	Applied Mathematics	3	0	3
AUT 1208	Automatic Transmissions I	3	3	4
		—	—	—
		15	15	20
<b>SEVENTH QUARTER</b>				
AUT 1205	Automatic Transmissions II	3	9	6
AUT 1206	Automotive Servicing II	3	9	6
BUS 1104	Small Business Operations II	2	2	3
PSY 1101	Human Relations	3	0	3
		—	—	—
		11	20	18
<b>Course available but not required:</b>				
AUT 1207	Automotive Special Problems	1-6	0	1-3

### Special Certificate Program in Automobile Mechanics

The College recognizes that individuals may want to enter employment in automotive service occupations either as a service station mechanic or as a mechanic's helper. The Automotive curriculum has been planned so that a student may elect to attend either two quarters to learn basic engine theory or five quarters for a basic automobile mechanic course. In such case, the College will award certificates for successful completion of two or five quarters of work.

### Requirements for Automobile Mechanics Certificate

#### Certificate of Automobile Engine Theory Course

A candidate must complete all of the required courses as shown in the first and second quarters of the automobile mechanics curriculum. He must make a passing grade on all courses outlined.

**Certificate of Basic Automobile Mechanic Course**

A candidate must complete all of the required courses as shown in the first five quarters of the automobile mechanics curriculum. He must make a passing grade on all courses outlined.

**Carpentry**

The building trades are becoming increasingly important in the economy of the Sandhills region. Carpentry is one of the basic building trades. The carpentry curriculum is a one-year program made up of both in-school courses and on-the-job or co-op training. The co-op part of the curriculum is conducted with the building contractors of the area. While in co-op training, students are paid while they learn and the co-op part of the curriculum is designed to lead to placement in a job upon completion of the training.

**CARPENTRY  
Curriculum by Quarters**

	Course	Hours Per Week		Quarter	
		Class	Lab.	Hours	Credit
<b>FIRST QUARTER</b>					
CAR 1101	Carpentry Fundamentals	4	0	4	
CAR 1201	Carpentry Co-op I	0	32	3	
MAT 1112	Building Trades Mathematics I	3	0	3	
DFT 1010	Blueprint Reading I	2	0	2	
		—	—	—	
		9	32	12	
<b>SECOND QUARTER</b>					
CAR 1102	Carpentry Framing	4	0	4	
CAR 1202	Carpentry Co-op II	0	32	3	
MAT 1113	Building Trades Mathematics II	2	0	2	
PSY 1101	Human Relations	3	0	3	
		—	—	—	
		9	32	12	
<b>THIRD QUARTER</b>					
CAR 1103	Exterior & Interior Trim	4	0	4	
CAR 1203	Carpentry Co-op III	0	32	3	
DFT 1011	Blueprint Reading II	2	0	2	
RDG 100	Reading	3	0	3	
		—	—	—	
		9	32	12	
<b>FOURTH QUARTER</b>					
CAR 1104	Finish Work	4	0	4	
CAR 1204	Carpentry Co-op IV	0	32	3	
ENG 1104	Effective Communications	3	0	3	
DFT 1012	Blueprint Reading III	2	0	2	
		—	—	—	
		9	32	12	

## Electronics Servicing

The expanded entertainment and educational facilities in the form of monochrome and color television, frequency modulated radio, high fidelity amplifiers and stereophonic sound equipment require expanded knowledge and skill. A large portion of time is spent in the laboratory verifying electronic principles and developing servicing techniques.

An electronics 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, inter-communication, public address and paging systems, high fidelity and stereophonic amplifiers, record players and tape recorders.

### ELECTRONICS SERVICING Curriculum by Quarters

	Course	Hours	Per Week		Quarter
			Class	Lab.	
<b>FIRST QUARTER</b>					
RDG	100	Reading	3	0	3
ELC	1112	Direct and Alternating Current	7	15	12
MAT	1115	Electrical Mathematics I	5	0	5
			—	—	—
			15	15	20
<b>SECOND QUARTER</b>					
BUS	1103	Small Business Operations I	3	0	3
ENG	1104	Effective Communications	3	0	3
ELN	1102	Vacuum Tubes & Solid State Devices	4	15	9
MAT	1116	Electrical Mathematics II	5	0	5
			—	—	—
			15	15	20
<b>THIRD QUARTER</b>					
BUS	1104	Small Business Operations II	2	2	3
ELN	1103	Radio and Amplifier Servicing	4	12	8
ELN	1104	Television Theory & Circuits I	4	6	6
			—	—	—
			10	20	17
<b>FOURTH QUARTER</b>					
ELN	1105	Television Theory & Circuits II	9	18	15
PSY	1101	Human Relations	3	0	3
			—	—	—
			12	18	18

## Radio and Television Repair

This program is designed as an option for Electronics Servicing students. The program is offered for students who do not wish to become owners and managers of radio and television businesses but who wish to specialize only in repair services.

**RADIO AND TELEVISION REPAIR**  
**Curriculum by Quarters**

		Course Hours Per Week		Quarter Hours Credit
		Class	Lab.	
<b>FIRST QUARTER</b>				
RDG 100	Reading	3	0	3
MAT 1115	Electrical Mathematics I	5	0	5
ELC 1112	Direct & Alternating Current I	7	15	12
		—	—	—
		15	15	20

<b>SECOND QUARTER</b>				
ELN 1106	Trouble-shooting Techniques	2	6	4
ELN 1102	Vacuum Tubes and Solid State Devices	4	15	9
BUS 1103	Small Business Operations I	3	0	3
		—	—	—
		9	21	16

<b>THIRD QUARTER</b>				
BUS 1104	Small Business Operations II	2	2	3
ELN 1103	Radio & Amplifier Servicing	4	12	8
ELN 1104	Television Theory & Circuits I	4	6	6
		—	—	—
		10	20	17

<b>FOURTH QUARTER</b>				
ELN 1105	Television Theory & Circuits II	9	18	15
PSY 1101	Human Relations	3	0	3
		—	—	—
		12	18	18

**Practical Nurse Education**

The increase in population has imposed a greater demand for nursing service personnel. The Practical Nurse Education Program has been designed to help supply a source of health workers prepared to render a specific nursing service. The practical nurse is capable of administering nursing care under the supervision of the professional nurse. The four quarter curriculum for this program is designed to include nursing studies. Specific clinical experience will allow the graduate to practice nursing at the level tested by the Licensing Examination for Practical Nurses. Upon completion of the prescribed curriculum, the graduate is awarded a diploma and is qualified to take the licensing examination for a Licensed Practical Nurse given by the North Carolina State Board of Nursing.

This curriculum has provisional approval by the North Carolina State Board of Nursing.

## PRACTICAL NURSE EDUCATION Curriculum by Quarters

<b>FIRST QUARTER</b>		Course Hours Per Week	Lab.	Quarter Hours Credit
NUR 1001	Practical Nursing I	21	9	24
	Consisting of:	Class Hours Per Quarter		
		Theory	Lab	Clinical
	Introduction to Nursing	10	6	
	Fundamentals	70	60	24
	Basic Science	70		
	Communications	30		
	Basic Nutrition	25		
	Basic Pharmacology	25	10	
	Total	230	76	24
<b>SECOND QUARTER</b>				
NUR 1002	Practical Nursing II	12	18	18
	Consisting of:	Class Hours Per Quarter		
		Theory	Lab	Clinical
	Communications	10		
	Obstetric Nursing	35	} 18 }	192
	Pediatric Nursing	35		
	Medical-Surgical Nursing	40		
	Total	120	18	192
<b>THIRD QUARTER</b>				
NUR 1003	Practical Nursing III	12	18	19
	Consisting of:	Class Hours Per Quarter		
		Theory	Lab	Clinical
	Communications	10		
	Obstetric Nursing	18	} 18 }	210
	Pediatric Nursing	18		
	Medical-Surgical Nursing	74		
	Total	120	0	210
<b>FOURTH QUARTER</b>				
NUR 1004	Practical Nursing IV	8	22	15
	Consisting of:	Class Hours Per Quarter		
		Theory	Lab	Clinical
	Vocational Adjustments	10		
	Obstetric Nursing	15	} 18 }	210
	Pediatric Nursing	15		
	Medical-Surgical Nursing	62		
	Total	102	18	210





# CONTINUING EDUCATION PROGRAMS

## PHILOSOPHY

Sandhills Community College is committed to continuing education of all adults in the area. To fulfill this commitment, the Division of Continuing Education offers a wide variety of courses designed to meet the needs and interests of people in the community. These range from learning to read and write to making better use of leisure time. Close cooperation is maintained with public agencies of the community to insure that adult needs and interests are being met. Through the continuing education programs students have opportunities to train and retrain in employment, grow in basic and general knowledge, develop crafts, and develop culturally.

## GENERAL INFORMATION

Some courses are offered on a continuing basis; others are given in response to requests of individuals or groups. A minimum enrollment of 12 is preferred for most classes. Persons desiring courses are urged to call the college, indicating course preference, day or night class, and fall, winter, spring or summer quarters. This information is helpful in scheduling. Course descriptions are not listed in this catalog; information regarding courses may be obtained by contacting the Division of Continuing Education. A definite schedule of classes to be offered in each quarter will be published approximately two weeks prior to registration.

### Admission

Any person 18 years of age, or anyone not yet 18 who has completed high school may enroll in continuing education programs.

### Registration

Registration will be held as follows:

Fall—Tuesday, September 3, 1974—7-10 p.m.

Wednesday, September 4, 1974—8 a.m.-5 p.m.

Winter—Thursday, January 2, 1975—7-10 p.m.

Friday, January 3, 1975—8 a.m.-5 p.m.

Spring—Tuesday, April 1, 1975—7-10 p.m.

Wednesday, April 2, 1975—8 a.m.-5 p.m.

Summer—To be announced

Fall—Tuesday, September 2, 1975—7-10 p.m.

Wednesday, September 3, 1975—8 a.m.-5 p.m.

Winter—Monday, January 5, 1976—7-10 p.m.

Tuesday, January 6, 1976—8 a.m.-5 p.m.

Spring—Thursday, April 1, 1976—7-10 p.m.  
Friday, April 2, 1976—8 a.m.-5 p.m.  
Summer—To be announced

Registration will be held in Room 116 of the Meyer Building on campus and will be conducted on a first-come, first-serve basis. Adults wishing to enroll in classes held off campus may register at the first meeting of the class. Adults are encouraged to pre-register when the opportunity is given, as the demand for some classes is so great that enrollment must be restricted to those who register first.

### **Fees**

A \$2.00 registration fee will be charged for each continuing education class in which a student enrolls. All fees are payable at the time of registration. Books and supplies, if required, will be furnished by the student.

### **Location of Classes**

Classes are held on the campus of Sandhills Community College and at designated locations through Moore and Hoke counties.

### **Certificates**

Certificates of completion are awarded students who complete a course or program; a minimum of 75% attendance is required.

## **ADULT BASIC EDUCATION**

Adult Basic Education classes are for adults 18 years of age or older who have less than an eighth grade education. Basic subjects of reading, writing, arithmetic, science, and social studies are offered. Instruction is also given in family relations, consumer education and preparation for the world of work. All adult basic education classes use programmed texts, which allow the fast and slow students an opportunity to move at their own speed and ability. Each student works individually, with the teacher providing help when needed. Upon completion of the eighth grade, students will be able to continue to work on the high school level. The classes are free of charge. Students interested should contact the college for information about classes in their community or enroll at the center when the classes are announced. Persons who know of other people who could benefit from this program are asked to encourage these individuals to enroll in the program. Classes are offered at the following locations:

**HOKE COUNTY—**

West Hoke School, Scurlock School, South Hoke School, Upchurch School, McCain Correction Center, House of Raeford and Mt. Elim Church.

**MOORE COUNTY—**

Robbins Elementary School, Moore County Prison, Addor Community Center, Long Leaf Courts in West Southern Pines, West End Elementary School, Westmoore Elementary School, Vass-Lakeview Elementary School, Aberdeen Community Center, Pinehurst Elementary School, Carthage Elementary School, Sandhills Furniture Company and Jackson Hamlet Community Center.

**High School Diploma Program**

Sandhills Community College, in cooperation with the Moore County School Board, issues an adult high school diploma to persons who satisfactorily complete the adult diploma program. This program is administered by the Learning Laboratory coordinators, and each student completes only the number of units he needs to graduate. Requirements for graduation are 18 units: 4 in English, 2 in Mathematics, 2 in Social Studies, 2 in Science, 1 in Health, and 7 in Electives.

**High School Equivalency Program**

The High School Equivalency Program is a program whereby an adult who did not complete his high school education may study to take the Tests of General Educational Development (GED) and demonstrate his general educational competence. He is awarded a certificate from the State Board of Education; this certificate is recognized and generally accepted as equivalent to a high school diploma.

Any person who is not a high school graduate may apply to take the GED if he is eighteen years of age or older, and is a resident of the state.

Sandhills Community College serves as an official GED Testing Center, and arrangements may be made with the Learning Laboratory coordinators to take the entire battery of GED tests. The cost is \$3.00.

**TV High School Program**

A high school program entitled "Your Future is Now" presented by WUNC TV, Channel 4, consists of sixty half-hour television lessons that cover the subject areas needed for the high school equivalency examinations. There are three textbooks, available from Sandhills Community College, which accompany the televised lessons. The main purpose of the television lessons and re-

lated textbooks is to help adults improve their skills in reading interpretation, mathematics, and use of English, and prepare them to take the GED tests.

### **The Learning Laboratory**

In the "Learning Lab," students may complete high school, improve skills used in their job, or study subjects of their choice. High school graduates who plan entrance into college will find review and refresher courses designed to make the transition to college work easier. Students may attend at times convenient to them. The lab is open from 8:00 A.M. to 10:00 P.M. Monday through Thursday, and 8:00 A.M. to 5:00 P.M. on Friday. Interested persons may register in the Learning Lab, Room 209, Administration Building during any of these hours. There is no charge.

### **Occupational Extension Education**

Sandhills Community College offers a variety of courses for those who desire short-term training, retraining or upgrading in vocational and professional areas. Some of the courses that have been offered in the past are listed in the following section. Other types of courses may be offered to meet expressed needs of the community when evidence of these needs is presented to the college.

#### **Some of the Occupational Extension Courses**

##### **Business Education**

Typewriting	Shorthand
Bookkeeping	Office Machines

##### **Health Education**

Nurse Assistant Training	Medical Terminology
Hospital Ward Clerk	Supervision in Hospitals
Hospital Orderly Training	Home Nurse Training

##### **Ambulance Training**

(The community college works with the State Board of Health to provide training for rescue squads and other ambulance attendants.)

##### **Hospitality Training**

Waiter-Waitress Training	Food Service Training
Basic Quantity Cooking	Hotel-Motel Service Training

##### **Apprenticeship and Licensure Training**

Plumbing	Bricklaying
Blueprint Reading	Small Engine Repair
Electrical Code	Automotive Maintenance
Electronic Communications	Small Appliance Repair

**Supervisory Development Training**

Principles of Supervision	Job Methods
Human Relations	Industrial First Aid
Effective Communication	Safety and Accident Prevention
Effective Speaking	Cost Accounting
Effective Writing	Conference Leadership
Reading Improvement	Instructor Training
Economics in Business and Industry	Job Analysis Training
The Supervision Work Measurement	Creative Thinking

**Fire Service Training**

Firefighting Procedures	Industrial Fire Brigade Training
Firemanship Training	Hospital Fire Safety
Equipment Use	

**Law Enforcement Training**

Chemical Testing	Shoplifting Prevention
Criminology	

**Childhood Specialist Training**

Child Growth and Development	Creative Activities for Children
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**New Industry Training**

(Sandhills Community College, in cooperation with the Industrial Services Division of the North Carolina Department of Community Colleges, provides instruction for new and expanding industries. The program incorporates job analysis, instructor recruiting and training and financial support for job instruction. Interested industries should contact the college or Industrial Services Division of the Department of Community Colleges, Raleigh, North Carolina.)

**Manpower Development and Training Programs**

Under the provisions of the Manpower Development Training Act (MDTA), persons who are unemployed or underemployed are eligible for job training. In cooperation with the Employment Security Commission of North Carolina, the college offers specialized training for employment in jobs that are available, thus bringing together citizens who need education and manpower needs in the community.

**General Adult Education**

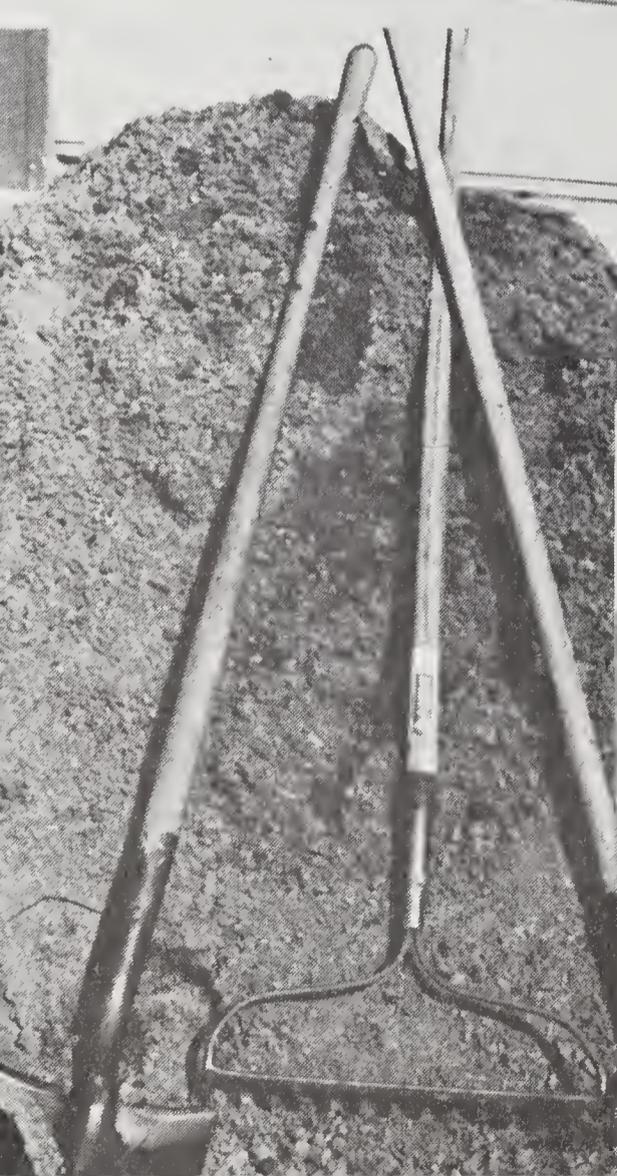
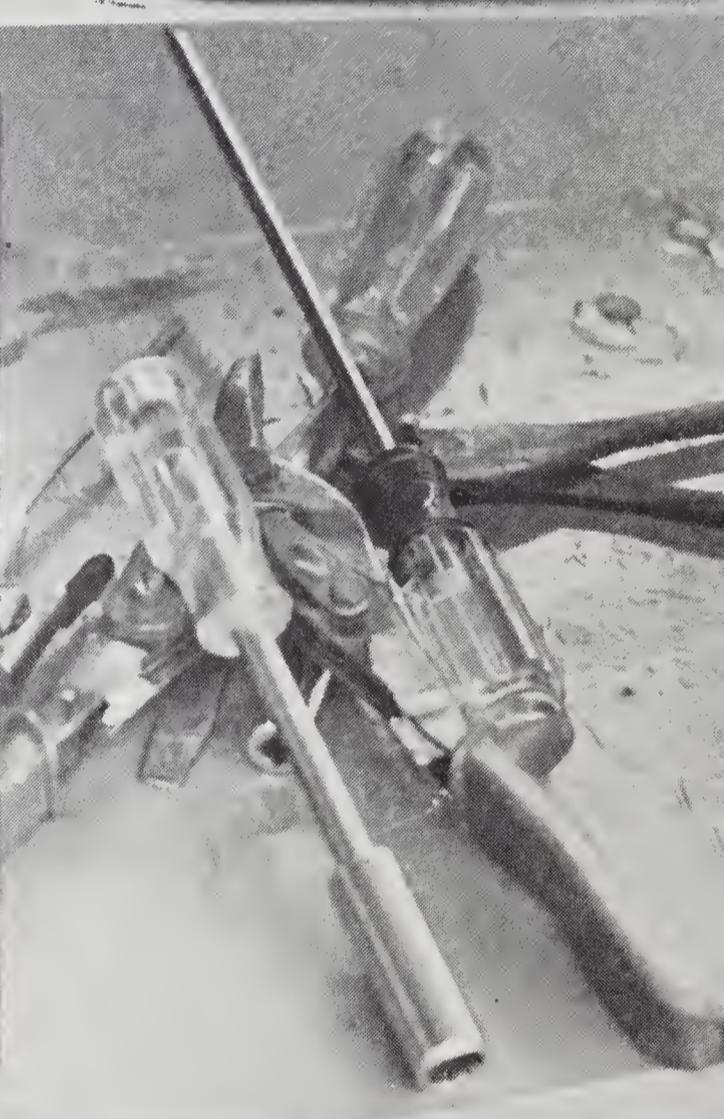
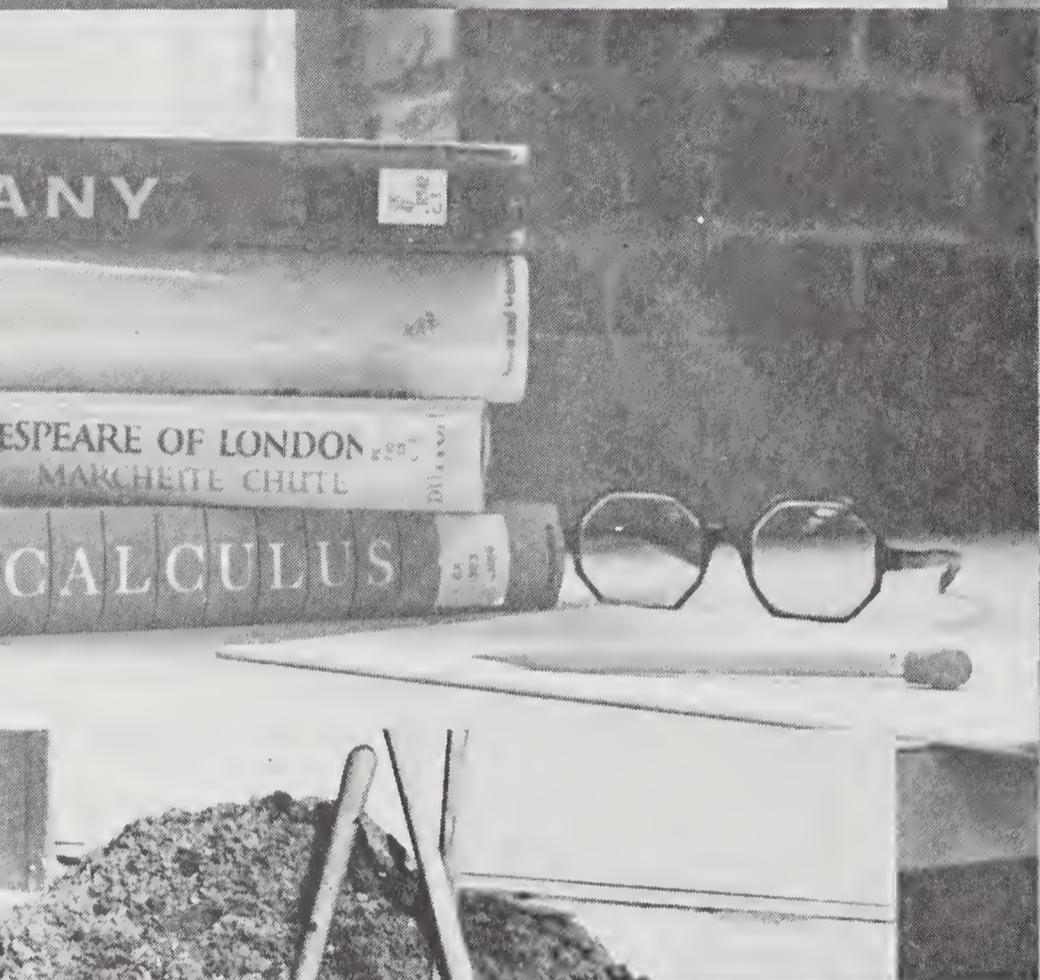
These courses are offered for adults who want personal or cultural enrichment, self-improvement, or the development of an avocational interest. Included in this program are courses in con-

sumer education, home and family life, senior citizen education, in-service education for teachers, the liberal arts, the fine and performing arts, and certain business education courses.

### **Community Services**

There are certain courses of cultural value demanded by the community which are not normally funded by the state; fees are collected from the students to support these classes. As a service to the community, seminars and conferences, exhibits, speakers bureau, lectures and films, and musical programs are included also.





# COURSE DESCRIPTIONS

Course designations consist of a three-letter prefix and a number which indicate the curriculum and the level of the course. Freshman level college transfer and technical courses are indicated by numbers ranging between 100-199; sophomore level college transfer and technical courses, 200-299. Vocational courses are numbered 1000 through 1999. On the same line, following the prefix and number, appear the course title, the number of quarter hours of credit, the number of lecture and laboratory hours shown in parentheses, and the symbols F, W, S, and SS indicating that the course is offered during the Fall, Winter, Spring or Summer Quarters.

One quarter hour of credit is earned for a class meeting one hour each week during the quarter, with the exception of regular laboratories and manipulative laboratories. Manipulative laboratory involves the development of skills and job proficiency. Credit of one quarter hour is given for each three of these hours. One quarter hour credit is given for each two regular laboratory hours. Credit of one quarter hour is given for each ten hours of supervised internship or practicum which involves working for pay.

## ART

- |     |     |   |                |
|-----|-----|---|----------------|
| ART | 101 | <b>Art Appreciation</b><br><b>Prerequisite:</b> None.<br>Readings and discussions in the theory of art. The purpose of this course is to develop an appreciation in the meaning and purpose of art, both historically and at the present time. This exploration will of necessity examine the position of the artist in society and the interaction of his work with the social structure as well as the psychological conditions that affect the arts. | 3 (3-0) FWS SS |
| ART | 121 | <b>Color and Design I</b><br><b>Prerequisite:</b> None.<br>The study of color and the exploration of color through practical application to beginning design problems.  | 3 (1-5) FWS    |
| ART | 122 | <b>Color and Design II</b><br><b>Prerequisite:</b> ART 121.<br>The study of design development in varied materials. Both two-dimensional and three-dimensional problems will be explored.   | 3 (1-5) FWS    |
| ART | 123 | <b>Color and Design III</b><br><b>Prerequisite:</b> ART 122.<br>Advanced in two-dimensional problems in fabric printing and wall decoration in creative stitchery. An individualistic approach will be stressed.  | 3 (1-5) FWS    |

- |     |     |  |                |
|-----|-----|--|----------------|
| ART | 131 | <b>Drawing and Composition I</b><br><b>Prerequisite:</b> None.<br>Beginning drawing and the study of the problems of composition. A wide variety of techniques including pencil, charcoal, conti, pen and ink, brush and ink, will be used. Drawing from life and the imagination with emphasis on personal expression.  | 2 (1-3) FWS    |
| ART | 132 | <b>Drawing and Composition II (Printmaking)</b><br><b>Prerequisite:</b> ART 131.<br>Using the knowledge gained in ART 131, the techniques of printing will be explored — wood-cut, linocut, monoprint, etc.  | 2 (1-3) FWS    |
| ART | 133 | <b>Drawing and Composition III</b><br><b>Prerequisite:</b> ART 132.<br>Advanced drawing techniques in figure representation and perspective drawing.   | 2 (0-3) FWS    |
| ART | 145 | <b>Painting/Graphics I</b><br><b>Prerequisite:</b> None.<br>The purpose of this course, and those following in sequence, is to introduce the student to various painting media and related graphic techniques in common use. This is primarily a studio course, but there will be lectures, demonstrations, field trips and visits by practicing artists where appropriate. Among areas to be explored will be the use of oils, acrylics, silkscreen and intaglio. | 3 (1-5) FWS    |
| ART | 146 | <b>Painting/Graphics II</b><br><b>Prerequisite:</b> ART 145.<br>Continuing study in painting and graphic techniques. The student will be encouraged to explore further those techniques most appropriate to his or her interests.  | 3 (1-5) FWS    |
| ART | 147 | <b>Painting/Graphics III</b><br><b>Prerequisite:</b> ART 146.<br>Advanced painting and graphics. One of the goals of this course will be the production of a related group of paintings suitable for exhibition or a portfolio of prints. Discussion and demonstration of exhibition techniques and presentation.  | 3 (1-5) FWS    |
| ART | 151 | <b>Watercolor</b><br><b>Prerequisite:</b> None.<br>A creative approach to techniques and materials in watercolor and gouache painting. Traditional techniques of watercolor painting will be a part of this course.  | 2 (1-3) SS     |
| ART | 171 | <b>Ceramic Design I</b><br><b>Prerequisite:</b> None.<br>Introduction to pottery making techniques including coil, slab, patch, pinch, and wheel thrown. Introduction to elementary experiments with clays and glazes, their composition and uses.   | 3 (1-5) FWS SS |

- ART 172 **Ceramic Design II** 3 (1-5) FWS SS  
**Prerequisite:** ART 171.  
 Wheelthrowing techniques will be stressed. Study and experiments with North Carolina raw materials used in ceramic wares and experiments to develop new usable compositions.
- ART 173 **Ceramic Design III** 3 (1-5) FWS SS  
**Prerequisite:** ART 172.  
 Advanced throwing. Advanced clay and glaze experiments and firing processes.
- ART 174 **Ceramic Design IV** 3 (1-5) FWS SS  
**Prerequisite:** ART 173.  
 Glaze and body research. Wheel, mosaic and sculpture problems.
- ART 175 **Ceramic Design V** 3 (1-5) FWS SS  
**Prerequisite:** ART 174.  
 Advanced design and materials research. Wheel work and sculptural techniques. Glaze and clay body research of original nature.
- ART 176 **Ceramic Design VI** 3 (1-5) FWS SS  
**Prerequisite:** ART 175.  
 Advanced design culminating in 12 pieces of original pottery and ceramic sculpture suitable for exhibit.
- ART 181 **Introduction to Crafts** 3 (0-6) FWS SS  
**Prerequisite:** None.  
 This course is designed for individual enrichment, for those planning careers in education, mental health, work with the handicapped, the young, or the aged. Materials and methods will include clay, creative stitchery, metal enameling, and varied found materials.

### AUTOMOTIVE

- AUT 1101 **Internal Combustion Engines** 6 (3-9) W  
**Corequisite:** AUT 1102.  
 Development of a thorough knowledge and ability in using, maintaining and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.
- AUT 1102 **Automotive Chassis and Suspension Systems** 5 (3-7) W  
**Corequisite:** AUT 1101.  
 Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of

suspension and steering systems. Units to be studied will be shock absorbers, springs, steering, steering linkage, front-end alignment, and all phases of wheel balance.

- AUT 1103 **Engine Electrical Systems** 6 (3-9) F  
**Prerequisite:** AUT 1101.  
 A thorough study of the electrical systems of the automobile. Battery, cranking devices, generators, ignition, accessories and wiring; alternator and voltage control.
- AUT 1104 **Engine Fuel Systems** 5 (3-7) F  
**Prerequisite:** AUT 1101.  
 Thorough study of fuel systems of auto vehicles. Fuel pumps, carburetors, fuel injector, characteristics of fuels, types of fuel systems; special tools and testing equipment for fuel systems.
- AUT 1106 **Automotive Air Conditioning** 6 (3-9) S  
**Prerequisite:** PHY 1101.  
 General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, in the methods of operation, and control; proper handling of refrigerants in charging the system.
- AUT 1107 **Braking Systems** 6 (3-9) S  
**Prerequisite:** PHY 1101.  
 A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.
- AUT 1109 **Basic Automotive Air Conditioning** 3 (2-2) SS  
**Prerequisite:** AUT 1112.  
 Introduction to the principles of refrigeration and the components of air conditioning systems; proper handling of refrigerants in charging the system.
- AUT 1110 **Automotive Front Suspension** 3 (2-2) SS  
**Prerequisite:** AUT 1112.  
 The theory of operation, study of geometric angles and the proper procedures for aligning a front suspension system will be studied.
- AUT 1111 **Auto Body Repair I** 9 (5-12) F  
**Prerequisite:** None.  
 Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contours of present day vehicles. Practical application of the basic principles of straightening, aligning, and painting damaged areas.
- AUT 1112 **Auto Body Repair II** 9 (5-12) W  
**Prerequisite:** AUT 1111.  
 A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads,

and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crown, and contour of the metal of the body and fenders. Metal working and painting.

AUT 1113 **Metal Finishing and Painting** 10 (5-15) S

**Prerequisite:** AUT 1112.

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

AUT 1114 **Body Shop Applications** 9 (3-19) SS

**Prerequisite:** AUT 1113.

General introduction and instruction in the automotive frame and front-end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of frames. The student applies all phases of training. Repair, order writing, parts purchasing, estimates of damage, and developing the final settlement with the adjuster.

AUT 1150 **Co-op Summer Work** 4 (0-40) SS

**Prerequisite:** Three or more quarters of instruction in automobile mechanics.

This is a full-time, pre-arranged, on-the-job training. The student is placed in a garage to gain experience during the summer and by contract, verbal or written, returns to the institution for the fall term. He enrolls at the school and is supervised by his instructor.

AUT 1201 **Automotive Power Train Systems** 5 (2-8) F

**Prerequisites:** AUT 1107, PHY 1101.

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 1202 **Automotive Servicing I** 7 (3-12) F

**Prerequisites:** AUT 1103, AUT 1104.

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Trouble-shooting of automotive systems; providing a full range of experiences in testing, adjusting, repairing, and replacing.

AUT 1203 **Automotive Emission Controls** 4 (3-3) W

**Prerequisites:** AUT 1103, AUT 1104.

A thorough study of engine and evaporative emission controls applied on current models of automobiles. Maintenance and test procedures for vacuum and electrical components used in the various systems. Diagnosis methods used to determine if emission controls are malfunctioning. Repair procedures for inoperative systems.

- AUT 1204 **Automotive Engine Tune-up** 6 (3-9) W  
**Prerequisites:** AUT 1103, AUT 1104.  
 This course is designed to provide depth in the understanding and use of various types of tune-up equipment. Emphasis is placed on gaining knowledge of the waveforms of the oscilloscope and other units of the Tune-up Tester. Through proper use of tune-up equipment, the student is expected to demonstrate his ability to diagnose malfunctions in ignition systems, cranking motors and charging circuits.
- AUT 1205 **Automatic Transmissions** 6 (3-9) S  
**Prerequisite:** AUT 1201.  
 This course is designed to provide a measure of depth in the understanding of automatic transmissions. Instruction includes classroom study, demonstrations, and student participation in disassembly, reassembly, and testing of selected transmissions. Special emphasis is placed on principles, function, construction, operation, servicing and "trouble-shooting" procedures, and repair of various types of automatic transmissions.
- AUT 1206 **Automotive Servicing II** 6 (3-9) S  
**Prerequisite:** AUT 1202.  
 Emphasis is placed on "trouble-shooting" and repairing the various component systems on vehicles provided for general repairs. The student is given in-depth experiences in diagnosis, testing, adjusting, repairing, and replacing component parts.
- AUT 1207 **Automotive Special Problems** 1-3 (\*\*) FWS SS  
**Prerequisite:** Admission to an Automotive program.  
 A course designed to allow the student to gain additional knowledge and/or skill in a specific area of automobile mechanics or body repair through independent study. This course open only to those students who need a minimum number of contact hours to qualify for educational benefits.
- AUT 1208 **Automatic Transmissions I** 4 (3-3) W  
**Prerequisite:** AUT 1201.  
 In this course, the basic principles applying to automatic transmissions are covered. This would include: basic hydraulics, hydraulic circuits, planetary gears, and types of holding devices used to control planetary gears. Initial pressure testing is also introduced. Upon completion of this course, a student should be ready to study individual transmissions in AUT 1205.

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\*\* Class hours and laboratory hours will vary from 1-6 depending on needs of veteran students.

## BIOLOGY

- BIO 110 **General Biology** 4 (3-3) FW SS  
**Prerequisite:** None.  
 This course is designed to familiarize the individual student

with the basic principles of life. Emphasis is placed upon matter and energy, cell content, cell physiology and cellular reproduction, genetics, evolution and ecology.

- BIO 111 **General Biology II** 4 (3-3) WS SS  
**Prerequisite:** BIO 110.  
 This course will acquaint the student with the plant and animal kingdoms. An application of the principles acquired in BIO 110 will be utilized to give the student an appreciation of nature, the plants and animals, and their relationships.
- BIO 112 **General Biology III** 4 (3-3) S SS  
**Prerequisite:** BIO 111.  
 Continuation of BIO 111.
- BIO 120 **Applied Botany** 4 (3-3) F  
**Prerequisite:** Admission to Landscape Gardening curriculum.  
 A foundation course in general botany designed to develop a basic understanding of plant life. Integrated within the lecture and laboratory will be a study of the cell, its function and association to roots, stems, leaves, and reproductive structures. Life cycles and taxonomy will be included throughout the course.
- BIO 200 **Botany I** 2 (2-0) W\*  
**Prerequisites:** BIO 110, 111, 112, or permission of instructor.  
 The first of a two-quarter sequence, this course is designed to review principles of botany taught in BIO 110 and 111 and to go beyond superficial coverage of botanical principles and theories. Emphasis will be placed on the plant divisions and life histories.
- BIO 201 **Botany II** 4 (2-4) S\*  
**Prerequisite:** BIO 200.  
 A continuation of BIO 200 with emphasis on higher plant structure, taxonomy of angiosperms, and field study. Principles taught in BIO 200 will be applied to the relationships of various taxa.
- BIO 205 **Invertebrate Zoology** 4 (2-4) S\*  
**Prerequisite:** BIO 112.  
 A survey of the invertebrates stressing life histories, morphology, anatomy, ecological distribution and importance. Several major dissections of the various phyla will be included as a part of the laboratory work.
- BIO 206 **Vertebrate Zoology** 4 (2-4) W\*  
**Prerequisite:** BIO 112.  
 The study of chordates from the embryo to the adult. Emphasis will be placed on structure and function of the major body systems of many chordates. Genetics will be introduced in both the lecture and laboratory.

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\* Course offered based upon demand.

- BIO 210 **Human Anatomy and Physiology I** 5 (4-3) F SS  
**Prerequisite:** None.  
 An integrated two-unit course designed to give the student a working knowledge of the structure, functions, nature, and mechanisms of the human body. Physio-chemical aspects of the animal cell; skeletal, muscular, and nervous systems studies are included.
- BIO 211 **Human Anatomy and Physiology II** 5 (4-3) W SS  
**Prerequisite:** BIO 210.  
 A continuation of BIO 210 with the anatomy and physiology of the major human systems such as circulatory, respiratory, digestive, excretory, reproductive, embryological and endocrine glands. Laboratory studies include dissection of major parts of animals and of small mammals.
- BIO 230 **Microbiology** 5 (4-3) FS  
**Prerequisites:** BIO 112, or BIO 211, or permission of instructor.  
 A survey of bacteria, yeasts, molds, rickettsiae, viruses, helminths; their structure, development, and function. Special emphasis is placed on the morphology, physiology, and ecology of bacteria.

### BUSINESS

- BUS 101 **Introduction to Business\*\*** 5 (5-0) FWS SS\*  
**Prerequisite:** None.  
 An introductory course in business education designed to provide the student with a basic understanding of the capitalistic system and the major facets of business—organization, production, personnel, finance and control. Emphasis is placed on the development of an adequate business vocabulary. Modern business trends and developments are stressed through the requirement of outside readings and the use of case studies.
- BUS 102 **Typewriting I\*\*** 4 (3-2) FWS SS\*  
**Prerequisite:** None.  
 Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation and manuscripts.
- BUS 103 **Typewriting II\*\*** 3 (1-4) FWS SS  
**Prerequisite:** BUS 102 or the equivalent. Speed requirement 30 words per minute for 5 minutes.  
 Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques applied in tabulation, manuscript, correspondence and business forms.

\* Course offered based upon demand.

\*\* Potential electives for the Associate in Arts and Associate in Science degrees.

- BUS 104 **Typewriting III\*\*** 3 (1-4) FWS SS  
**Prerequisite:** BUS 103 or the equivalent. Speed requirement 40 words per minute for 5 minutes.  
 Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.
- BUS 106 **Shorthand I\*\*** 4 (3-2) FW  
**Prerequisite:** None.  
 A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms and phrases.
- BUS 107 **Shorthand II\*\*** 4 (3-2) WS  
**Prerequisite:** BUS 106, with a grade of C or better, or minimum dictation rate of 40 words per minute on material.  
 Continued study of theory with greater emphasis on dictation and elementary transcription.
- BUS 108 **Shorthand III\*\*** 4 (3-2) S SS  
**Prerequisite:** BUS 107, or dictation rate of 60 words a minute on a 3 minute test of new material.  
 Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.
- BUS 110 **Office Machines I\*\*** 3 (1-4) FWS SS\*  
**Prerequisite:** None.  
 A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full-keying machine, listing calculator, and key-driven calculator.
- BUS 112 **Filing** 3 (3-0) F  
**Prerequisite:** None.  
 Fundamentals of indexing, requisition and charge procedures, and alphabetic, geographic, subject, and numeric correspondence filing. Theory and practice by the use of miniature letters, filing boxes, and guides.
- BUS 115 **Business Law I** 3 (3-0) FW SS  
**Prerequisite:** BUS 101 or permission of department chairman.  
 A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

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\* Course offered based upon demand.

\*\* Potential electives for the Associate in Arts and Associate in Science degrees.

- BUS 116 **Business Law II** 3 (3-0) WS SS\*  
**Prerequisite:** BUS 115.  
 Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership, corporations, mortgages, and property rights.
- BUS 130 **Business Mathematics\*\*** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A course stressing the fundamental operations and their application to business problems. Topics covered: payroll, price marking, interest and discount, commission, taxes and pertinent use of mathematics in the field of business.
- BUS 131 **Principles of Accounting I\*\*** 4 (3-2) FW SS\*  
**Prerequisite:** None.  
 Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.
- BUS 132 **Principles of Accounting II\*\*** 4 (3-2) WS SS\*  
**Prerequisite:** BUS 131.  
 Accounting for receivables, inventory, depreciation of plant assets, payroll, and internal control. Special emphasis is given to deferral and accrual problems. Critical examination and analysis of accounting principles with emphasis on determination of cost and income, valuation and statement presentation.
- BUS 133 **Principles of Accounting III\*\*** 4 (3-2) FS SS\*  
**Prerequisite:** BUS 132.  
 Corporate capital structure and distribution of earnings with emphasis on branch and department operations. Introduction to cost accounting for materials, labor, and burden control in manufacturing companies. Statement review and examination of budgetary controls.
- BUS 150 **Business Administration (AIB 111)** 4 (0-4)\*  
**Prerequisite:** None.  
 Emphasis is placed on the managerial responsibility of coordinating carefully the many facets of a business enterprise. It also stresses the background of administration, financial management, production, labor-management relations, marketing, coordination and control, and public relations problems.
- BUS 152 **Financing Business Enterprise (AIB 123)** 4 (0-4)\*  
**Prerequisite:** None.  
 Stress is placed on the difference between lending and invest-

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\* Course offered based upon demand.

\*\* Potential electives for the Associate in Arts and Associate in Science degrees.

ing, and on the fact that investing in a corporation and financing a corporation are different aspects of the same subject. In this course, the material is presented from the viewpoint of the corporate treasurer who must safeguard the financial future of his corporation.

- BUS 205 **Advanced Typewriting** 3 (1-4) FWS SS  
**Prerequisite:** BUS 104.  
 Speed requirement, 50 words per minute for five minutes. Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate in the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts, and legal documents.
- BUS 206 **Dictation and Transcription I** 4 (3-2) FW SS  
**Prerequisite:** BUS 108.  
 Develops the skills of taking dictation and of transcribing, at the typewriter, materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar materials at varying rates of speed. Minimum dictation rate of 80 words per minute required for five minutes on new material.
- BUS 207 **Dictation and Transcription II** 4 (3-2) WS  
**Prerequisite:** BUS 206.  
 Covering materials appropriate to the course of study, the student develops the accuracy, speed and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 90 words per minute required for five minutes on new material.
- BUS 212 **Machine Transcription** 3 (1-4) S SS  
**Prerequisite:** BUS 103.  
 A study of the principles and methods of operation of the various transcribing machines commonly used in the business office. Students develop skill in the use of machines for transcribing from recorded dictation.
- BUS 213 **Office Procedures** 5 (5-0) S SS  
**Prerequisite:** BUS 101.  
 All the general office skills excluding machine operations and shorthand are discussed. These include: receptionist duties, handling mail, telephone techniques, travel information, telegrams, purchasing of supplies, desk and office organization, use of banking services, and personal problems in getting along with others on the job.
- BUS 220 **Business Communication** 5 (5-0) W SS  
**Prerequisite:** ENG 111. Competency in typing required.  
 Develops skills in techniques in writing business communica-

- tions. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiries.
- BUS 222 **Intermediate Accounting I** 4 (3-2) F  
**Prerequisite:** BUS 133.  
 Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.
- BUS 223 **Intermediate Accounting II** 4 (3-2) W  
**Prerequisite:** BUS 222.  
 Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.
- BUS 225 **Cost Accounting** 4 (3-2) W  
**Prerequisite:** BUS 133.  
 Nature and purposes of cost accounting; accounting for direct labor, materials and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures.
- BUS 229 **Taxes** 4 (3-2) F SS\*  
**Prerequisite:** BUS 133.  
 Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.
- BUS 232 **Sales Development** 3 (3-0) F SS\*  
**Prerequisites:** BUS 101, BUS 130.  
 A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.
- BUS 233 **Insurance** 5 (5-0) S  
**Prerequisite:** BUS 101.  
 A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included.
- BUS 235 **Principles of Management** 5 (5-0) S SS\*  
**Prerequisite:** BUS 101 or permission of department chairman.

\* Course offered based upon demand.

- Fundamentals of staff and operative management; management principles and techniques of organizing, directing and controlling. Application of techniques of specific fields.
- BUS 239 **Marketing** 5 (5-0) S SS\*  
**Prerequisites:** BUS 101, ECO 202.  
 A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.
- BUS 243 **Advertising** 4 (3-2) W SS\*  
**Prerequisite:** BUS 101.  
 The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.
- BUS 249 **Fund Accounting (Governmental)** 3 (3-0) S  
**Prerequisite:** BUS 223.  
 Principles and procedures for application of fund accounting to governmental units, institutions and certain other non-profit entities.
- BUS 269 **Auditing** 4 (3-2) S  
**Prerequisite:** BUS 223.  
 Principles of conducting audits and investigations; setting up accounts based on audits; collecting data on working papers; arranging and systematizing the audit, and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control.
- BUS 276 **Money and Banking** 5 (5-0) S  
**Prerequisite:** ECO 202.  
 A study of money, credit, commercial and central banking; credit control under the Federal Reserve System; monetary and fiscal theories and policies.
- BUS 278 **Principles of Bank Operation (AIB 202)** 4 (4-0)\*  
**Prerequisite:** None.  
 This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his chosen profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement.
- BUS 279 **Bank Investments (AIB 203)** 4 (4-0)\*  
**Prerequisite:** None.  
 Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course

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\* Course offered based upon demand.

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

**BUS 280 Bank Management By Objectives (AIB 204) 1 (0-2)\***  
**Prerequisite:** None.

This middle management seminar is designed to assist bank officers in learning how to translate bank problems into realistic goals, for the individual and the bank, through the management-by-objectives system. Cases and outside readings are used in this seminar. It can be presented as a brief, intense workshop or as an eight-session seminar.

**BUS 281 Bank Management (AIB 205) 4 (4-0)\***  
**Prerequisite:** None.

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

**BUS 282 Bank Letters and Reports (AIB 206) 4 (4-0)\***  
**Prerequisite:** None.

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

**BUS 283 International Banking (AIB 207) 4 (4-0)\***  
**Prerequisite:** None.

The second edition of this text is an introduction to a vast field for those working in international departments, as well as for those involved in the domestic activities of their banks. The essential objective of this course is to present the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another.

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\* Course offered based upon demand.

- BUS 284 **Conference Planning and Leadership (AIB 208)** 1 (0-2)\*  
**Prerequisite:** None.  
This course is centered on a specific phase of the problem of human understanding. It is concerned with an important responsibility of management: to communicate and to coordinate ideas in the most effective way possible. It gives consideration to the dynamics of human interaction in groups convened to solve problems and make decisions. The essentials of parliamentary procedure are also stressed, thus presenting an effective technique for achieving consensus and formalizing and recording the decision-making process.
- BUS 285 **Installment Credit (AIB 209)** 4 (4-0)\*  
**Prerequisite:** None.  
In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its profits on this particular kind of credit. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending.
- BUS 286 **Planning Management Development (AIB 212)** 1 (0-2)\*  
**Prerequisite:** None.  
This middle management seminar is designed to assist bank officers who are responsible for the planning, recruiting, and development of bank management personnel. Cases and outside readings are used in this seminar. It can be presented as a brief, intense workshop or as a twelve-session seminar.
- BUS 287 **Trust Functions (AIB 213)** 4 (4-0)\*  
**Prerequisite:** None.  
This new course presents a complete picture of the services rendered by institutions engaged in trust business. Providing an introduction to the services and duties involved in trust operations, the course is intended for all bankers, not only those who are engaged in trust business. It endeavors to keep clear the distinction between business and legal aspects of trust functions.
- BUS 288 **Credit Administration (AIB 219)** 4 (4-0)\*  
**Prerequisite:** None.  
This course, directed toward the executive level, concerns itself partly with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation

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\* Course offered based upon demand.

and analysis, credit techniques, specific credit problems, and regular as well as unusual types of loans are discussed.

- BUS 289 **Savings and Time Deposit Banking (AIB 231)** 4 (4-0)\*  
**Prerequisite:** None.  
 This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment.
- BUS 290 **Agricultural Finance (AIB 232)** 4 (4-0)\*  
**Prerequisite:** None.  
 Reflecting the rapid growth of the off-farm agribusiness sectors (the suppliers of farm inputs), this course emphasizes general principles associated with the evaluation of management and the use of capital, rather than stressing the examination of land and labor resources, which are more closely aligned with agricultural production. An understanding of agricultural finance should help the banker in satisfying the credit needs of modern agriculture.
- BUS 291 **Analyzing Financial Statements (AIB 233)** 4 (4-0)\*  
**Prerequisite:** None.  
 A fourth edition of the textbook is used for this course and is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis.
- BUS 292 **Loss Prevention (AIB 234)** 1 (0-2)\*  
**Prerequisite:** None.  
 This seminar focuses on check cashing, check swindles, bank holdups, and security procedures.
- BUS 293 **Loan Discount (AIB 235)** 3 (3-0)\*  
**Prerequisite:** None.  
 This seminar teaches bank employees the essential facts about promissory notes, including calculating interest and discounting commercial paper; guarantees; general collateral agreements; examining and processing documents accompanying

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\* Course offered based upon demand.

notes secured by stocks, bonds, and savings account passbooks, and the concepts of attachment, perfection, priority, default, and foreclosure.

BUS 294 **Home Mortgage Lending (AIB 236)** 4 (4-0)\*

**Prerequisite:** None.

This course approaches the subject from the viewpoint of the mortgage loan officer who seeks to develop a sound mortgage portfolio. A picture of the mortgage market is presented first, then the acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing, and finally the obligations of the mortgage loan officer in overall portfolio management.

BUS 295 **Selling Bank Services (AIB 237)** 1 (0-2)\*

**Prerequisite:** None.

Teaches tellers and new-accounts personnel how to recognize and meet bank customer needs: checking accounts, savings services, loans to individuals, safe deposit boxes, travelers checks and cross selling.

BUS 296 **Bank Public Relations and Marketing (AIB 239)** 4 (4-0)\*

**Prerequisite:** None.

This course discusses the basis of public relations, both internal and external, and seeks simply to explain the why, the what, and some of the how of public relations and marketing. It is intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing.

BUS 298 **Supervision and Personnel Administration (AIB 272)**

4 (4-0)\*

**Prerequisite:** None.

This course is designed to aid first-line supervisors in making a smooth transition from expert in a particular task to the role of a supervisor who must produce results through the efforts of other people. In this role, the first-line supervisor must reflect management attitudes and carry out management policies while at the same time inspiring his group to achieve friendly cooperation and maximum production. It should be recognized that the same principles are involved at every level of supervision within the organization.

BUS 1103 **Small Business Operations I** 3 (3-0) W

**Prerequisite:** None.

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventory, layout of equipment and offices, methods of improving business, and employer-employee relations.

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\* Course offered based upon demand.

- BUS 1104 **Small Business Operations II** 3 (2-2) S  
**Prerequisite:** BUS 1103.  
 Principles, techniques, and practices of establishing, keeping, and using financial records for a small business. Special emphasis on the recognition of revenue and expense, computation of pay roll deductions, and verification of cash balances in the proprietorship form of business organization.

### CARPENTRY

- CAR 1101 **Carpentry Fundamentals** 4 (4-0) S  
**Prerequisite:** Admission to curriculum.  
 A brief history of the construction industry; introduction to care and use of hand and power tools with emphasis on safety; study of foundations and site preparation; introduction to materials and methods.
- CAR 1102 **Carpentry Framing** 4 (4-0) SS  
**Prerequisite:** Admission to curriculum.  
 A continuation of carpentry fundamentals. Instruction in framing of floors, walls, partitions, roofs, and decks; erection of siding; design and construction of trusses; design of post and beam construction.
- CAR 1103 **Exterior and Interior Trim** 4 (4-0) F  
**Prerequisite:** Admission to curriculum.  
 Study of cornice work, window and door framing, casings and stairs; construction of millwork and cabinetry; material and finishes will be studied.
- CAR 1104 **Finish Work** 4 (4-0) W  
**Prerequisite:** Admission to curriculum.  
 Included will be materials and methods used in finishing carpentry work such as exterior, cornice, door and window trim; interior flooring, cornice construction, window and door facing, and moulding; built-in units; installation of hardware.
- CAR 1201 **Carpentry Co-op I** 3 (0-32) FS  
**Prerequisite:** Admission to curriculum.  
 A pre-arranged supervised on-the-job experience working under a skilled or master carpenter. The student is placed in the employment of a construction firm and by contract, either written or verbal, must attend all theory and related classes simultaneously. He enrolls at the college and is supervised by his instructor. Weekly reports of on-the-job activities are required.
- CAR 1202 **Carpentry Co-op II** 3 (0-32) W SS  
**Prerequisite:** CAR 1201.  
 Continuation of CAR 1201. Experience in new construction activities. Student should exhibit initiative to complete jobs with limited supervision.

CAR 1203 **Carpentry Co-op III** 3 (0-32) F S  
**Prerequisite:** CAR 1202.  
Continuation of CAR 1202. Experience on additional new jobs. Student should be able to do basic carpentry jobs of moderate difficulty with little supervision.

CAR 1204 **Carpentry Co-op IV** 3 (0-32) W SS  
**Prerequisite:** CAR 1203.  
Continuation of CAR 1203. Student should be able to complete most carpentry jobs with little supervision; should show initiative in planning and executing jobs.

### CHEMISTRY

CHM 110 **General Chemistry I** 3 (3-0) FW SS  
**Prerequisite:** None.  
**Corequisite:** CHM 110L.  
An introductory course covering basic concepts: Atomic and molecular theory, chemical bonding; classification of the elements, their properties and reactions based on Periodic Law.

CHM 110L **General Chemistry Lab I** 1 (0-3) FW SS  
**Prerequisite:** None.  
**Corequisite:** CHM 110.  
An introductory laboratory course with experiments designed to accent the principles presented in CHM 110 with an emphasis on quantitative determinations.

CHM 111 **General Chemistry II** 3 (3-0) WS SS  
**Prerequisite:** CHM 110.  
**Corequisite:** CHM 111L.  
A continuation of CHM 110. Additional topics include quantitative stoichiometry.

CHM 111L **General Chemistry Lab II** 1 (0-3) W S SS  
**Prerequisite:** CHM 110L.  
**Corequisite:** CHM 111.  
A continuation of CHM 110L with emphasis on volumetric, gravimetric and instrumental analysis.

CHM 112 **General Chemistry III** 3 (3-0) S SS  
**Prerequisite:** CHM 111.  
**Corequisite:** CHM 112L.  
A continuation of CHM 111. Topics include kinetics, equilibrium, and nuclear chemistry.

CHM 112L **General Chemistry Lab III** 1 (0-3) S SS  
**Prerequisite:** CHM 111L.  
**Corequisite:** CHM 112.  
A continuation of CHM 111L with emphasis on volumetric and instrumental analysis.

- CHM 205 **Organic Chemistry I** 4 (3-3) F  
**Prerequisite:** CHM 112.  
Chemistry of the compounds of carbon. Topics include basic nomenclature, properties and reactions of aliphatic hydrocarbons. Reaction mechanisms are emphasized. The laboratory work is designed to develop basic laboratory techniques of synthesis, separation, purification and identification.
- CHM 206 **Organic Chemistry II** 4 (3-3) W  
**Prerequisite:** CHM 205.  
A continuation of CHM 205. Aliphatic, alicyclic, and aromatic compounds are studied with an emphasis upon determination of molecular structure and correlations between structure and reactivity. NMR, IR, and mass spectroscopy are applied in structure determination. Laboratory work includes synthesis and qualitative analysis with emphasis upon spectroscopy and chromatographic techniques.
- CHM 207 **Organic Chemistry III** 4 (3-3) S  
**Prerequisite:** CHM 206.  
A continuation of CHM 205 and CHM 206. Emphasis is upon molecular structures of biological importance and the correlation of these structures to reactivity. The laboratory work emphasizes modern techniques of separation and identification.

### CIVIL TECHNOLOGY

- CIV 101 **Surveying I** 4 (2-6) F  
**Corequisites:** DFT 101, MAT 131.  
Theory and practice of plane surveying including taping, differential and profile leveling, transit, stadia and transit-tape surveys; care and use of instruments.
- CIV 102 **Surveying II** 4 (2-6) S  
**Prerequisite:** CIV 101.  
Triangulation of ordinary precision; cross sections; use of plane table; calculation of areas of land; land surveying; earthwork topographic surveys and mapping.
- CIV 103 **Surveying III** 4 (2-6) F  
**Prerequisite:** CIV 102.  
Route surveys by ground methods; simple, compound, reverse, parabolic and spiral curves; geometric design and highways; highway surveys and plans, including mass diagrams.
- CIV 105 **Architectural Materials and Methods** 4 (3-3) F  
**Prerequisite:** None.  
Materials used in the construction of architectural structures will be studied. Field trips to construction sites and study of manufacturer's specifications for materials. Properties and standard sizes of structural materials, and construction techniques are included.

- CIV 110 **Elementary Surveying** 5 (3-6) S  
**Prerequisite:** MAT 115.  
Use of the contractor's level-transit, plane table, chaining, stadia, and other elementary survey procedures are studied. Field work includes obtaining and recording topographical, leveling, and alignment data, and drafting is taught so that this information can be incorporated into useful sketches and contoured landscape drawings.
- CIV 111 **Site Surveying** 3 (1-6) S  
**Prerequisite:** CIV 101.  
Basic instrumentation and topography will be studied. Chaining, leveling and operation of the transit will be applied to site surveying along with drafting room application of the field notes to locating the building on the site as well as deed registry. Finally, the cycle will be completed by application of the drafting room techniques to the site by staking out the building, erecting batter boards, and completing the preliminaries to construction.
- CIV 114 **Statics** 4 (3-3) SS  
**Prerequisite:** MAT 132.  
**Corequisite:** PHY 101.  
Forces, resultants, and types of force systems; moments, equilibrium of coplanar forces by analytical and graphic methods; stresses and reactions in simple structures; equilibrium of forces in space; static and kinetic friction; center of gravity, centroids, and moment of inertia.
- CIV 202 **Properties of Soils** 4 (3-3) W  
**Prerequisite:** None.  
Study of soil types and their physical properties; mechanical analysis and tests of soils; techniques of subsurface investigation; earth pressure theories; bearing capacity; stability of slopes; hydrostatics of ground water; methods of compaction and consolidation.
- CIV 217 **Construction Methods and Equipment** 4 (3-3) S  
**Prerequisite:** DFT 102.  
Excavating methods and equipment used in building and highway construction; pile driving; construction techniques and equipment used in reinforced concrete buildings, bridges, lift-slabs, thin shells and folded plates; erection methods and equipment of structural steel buildings and bridges; carpentry in house and heavy timber construction; construction safety. Field inspection trips.
- CIV 219 **Plain Concrete and Asphalt** 4 (3-3) F  
**Prerequisite:** CIV 221.  
Study and testing of the composition and properties of concrete including cementing agents, aggregates, admixtures, and air-

- entrainment; design and proportioning of concrete mixes to obtain pre-determined strengths and properties; methods of placing and curing concrete; standard control tests of concrete. Investigation of the engineering properties of asphalt.
- CIV 220 **Construction Planning** 3 (2-3) W  
**Prerequisite:** CIV 217.  
 Analysis of construction plant layout requirements and contractor's organization for building and highway projects. Construction scheduling; project control and supervision; coordinating trades on building construction. Operations, charts, and practical application of Critical Path Method (CPM) for construction planning, scheduling, and "time-cost" determination.
- CIV 221 **Strength of Materials and Properties of Engineering Materials** 4 (3-3) S  
**Prerequisite:** CIV 114.  
 Fundamental stress and strain relationship torsion; shear and bending moments; stresses and deflections in beams; introduction to statically indeterminate beams; columns; combined stresses. Study and testing of the properties of ferrous and non-ferrous metals, timber, stone, clay products, bituminous cementing materials, load and strain measurements; behavior of materials under load, qualities other than strength; control of the properties of the materials; non-destructive tests.
- CIV 222 **Structures I** 3 (3-0) W  
**Prerequisite:** CIV 221.  
 Structural steel and timber design theory and principles necessary for design of simple structures; design and analysis of beams, columns, tension and compression members and their connections.
- CIV 223 **Codes, Specifications and Contracts** 2 (2-0) W  
**Prerequisite:** None.  
 Basic principles and methods most significant in contract relationships; appreciation of the legal considerations in construction work; study of the National Building Code and local building codes, interpreting and outlining specifications.
- CIV 224 **Structures II** 3 (3-0) S  
**Prerequisite:** CIV 221.  
 Reinforced concrete design theory and principles necessary for design of concrete structures; design and analysis of slabs, beams, columns, foundations and retaining walls.
- CIV 226 **Architectural Mechanical Equipment** 3 (3-0) W  
**Prerequisite:** PHY 103.  
 General study of heating, air conditioning, plumbing and electrical equipment, materials and symbols. Building code requirements pertaining to residential and commercial structures.

- Reading and interpretation of working drawings by mechanical engineers. Coordination of mechanical and electrical features with structural and architectural designs.
- CIV 227 **Construction of Roads and Pavements** 4 (3-2) S  
**Prerequisites:** CIV 202, CIV 217.  
 Construction practices for various types of road building, including soil properties, grading, subgrading, base courses, drainage, embankments, compaction, and formwork. Design, construction, and testing of rigid Portland-cement concrete and flexible bituminous pavements. Field inspection trips.
- CIV 237 **Construction Estimating** 5 (3-6) S  
**Prerequisite:** CIV 220.  
 Interpretation of working drawings of timber, structural steel, and reinforced concrete structures and highways; preparation of material and labor quantity surveys from plans and specifications; approximate and detailed estimates of costs, bidding procedures and preparation of bids.
- CIV 240 **Co-op Summer Work** 4 (0-40) SS  
**Prerequisite:** Completion of first year Civil or Architectural Technology curriculum.  
 This is full-time, pre-arranged, on-the-job training. The student is placed in an architect's, engineer's or surveyor's office or a construction firm to gain experience during the summer. He enrolls at the school and is periodically supervised by his instructor.

### DRAFTING

- DFT 101 **Technical Drafting I** 4 (2-6) F  
**Prerequisite:** None.  
 A course designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views. Projection problems dealing with principles of descriptive geometry, involving points, lines, planes, and connectors. The principles of isometric, oblique, and perspective drawings are introduced.
- DFT 102 **Technical Drafting II** 4 (2-6) W  
**Prerequisite:** DFT 101.  
 Development of techniques in lettering, symbols, and their interpretation; dimensioning, freehand and instrument drafting. Drawing of construction details, using appropriate material symbols and connections. Sections, scale details and full-size details will be prepared from preliminary sketches. Applications of descriptive geometry are used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections and development.

- DFT 108 **Architectural Drafting I** 4 (2-6) S  
**Prerequisite:** DFT 102.  
 An approach in depth to the study of architectural drafting. Development of techniques in architectural lettering, dimensioning, freehand sketching and instrument drawing. Drawings of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details and full-size details will be prepared from preliminary sketches.
- DFT 210 **Architectural Design** 3 (3-0) F  
**Prerequisite:** DFT 108.  
 The principles of site planning and building design are studied. The student will design projects assigned by the instructor.
- DFT 220 **Architectural Drafting II** 4 (2-6) W  
**Prerequisite:** DFT 108.  
 Drawing of structural plans and details as prepared for building construction including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members. Reference materials will be used to provide the draftsman with skills and knowledge in locating data and in using handbooks. Drawing of plans and details as prepared for mechanical equipment such as air conditioning, plumbing, and electrical systems by using appropriate symbols and conventions. Consideration is given to coordination of mechanical and electrical features with structural and architectural components.
- DFT 222 **Architectural Drafting III** 4 (2-6) S  
**Prerequisites:** CIV 111, DFT 220, DFT 237.  
 Preparation of the complete set of working drawings for the architectural structure. Preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules. Site and landscaping plans will be studied and drawn. Final assembly of the complete document for construction purposes will be made.
- DFT 237 **Construction Estimating** 5 (3-6) S  
**Prerequisites:** CIV 217, CIV 220, CIV 223.  
 Interpretation of working drawings for a project; preparation of material and labor quantity surveys from plans and specifications; approximate and detailed estimates of cost. The student will study materials take-off, labor take-off, sub-contractor's estimates, overhead costs, and bid and contract procedures.
- DFT 1010 **Blueprint Reading I** 2 (2-0) FS  
**Prerequisite:** Admission to carpentry curriculum.  
 Principles of interpreting residential blueprints with emphasis on symbols, plans, elevation, details and types of drawings.

- DFT 1011 **Blueprint Reading II** 2 (2-0) FW  
**Prerequisite:** DFT 1010.  
 Continuation of Blueprint Reading I. Emphasis on reading details and specifications of foundations, floor plans, elevation and construction features. Reading electrical, mechanical, and plumbing plans for trade information.
- DFT 1012 **Blueprint Reading III** 2 (2-0) FW  
**Prerequisite:** DFT 1011.  
 Continuation of Blueprint Reading II; emphasis on reading industrial plans and specifications for planning and estimating, study of building codes.
- DFT 1101 **Schematics and Diagrams: Power Mechanics** 1 (0-3) F  
**Prerequisite:** None.  
 Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures and notes.

### DRAMA

- DRA 110 **Theatre Practice** 1 (1-0) FWS  
**Prerequisite:** None.  
 Practical application of work needed in backstage organization of plays. Solving of specific problems in scenery, lighting, and costuming in major productions. May be repeated for credit. Night meetings.
- DRA 111 **Theatre Performance** 1 (1-0) FWS  
**Prerequisite:** None.  
 Participation in major productions. Open only to students selected in open auditions prior to each production. May be repeated for credit. Night meetings.

### ECONOMICS

- ECO 201 **Economics I** 5 (5-0) FWS SS  
**Prerequisite:** BUS 101 required for technical students only.  
 A general course designed to give an understanding of the organization of economic life. Includes the fundamental principles and problems of economics from the macroeconomic viewpoint: national income analysis, income determination theory, monetary theory and fiscal policy.
- ECO 202 **Economics II** 5 (5-0) FWS SS  
**Prerequisite:** ECO 201.  
 A continuation of Economics 201, Microeconomics. Greater depth in principles of economics: Demand functions, costs of production and supply, market structures, unions and international trade and finance.

**ELECTRICITY**

- ELC 1112 **Direct and Alternating Current** 12 (7-15) F  
**Prerequisite:** None.  
 A study of the structure of matter and the electron theory, the relationship between voltage, current, and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's law and Kirchoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis.

**ELECTRONIC DATA PROCESSING**

- EDP 101 **Functional Wiring Principles** 3 (2-2) F  
**Prerequisite:** None.  
 A study of unit record procedures and operating practices. Student laboratory work includes punched card preparation and handling with emphasis on key punch, sorter, gang punch reproducer and accounting machine control.
- EDP 102 **Compiler Language I** 3 (2-2) F  
**Prerequisite:** None.  
 A fundamental course in FORTRAN or PL-1 programming. The FORTRAN or PL-1 language structure, statements and programming methods and techniques are studied. The student will develop program logic and write FORTRAN or PL-1 programs for solving sample problems.
- EDP 103 **Compiler Language II** 4 (3-2) W  
**Prerequisite:** EDP 104.  
 This course is designed to provide basic training in COBOL programming. The COBOL language structure, statements and programming methods and techniques are studied. The student will develop program logic and write COBOL programs for solving sample problems.
- EDP 104 **Introduction to Data Processing Systems** 4 (3-2) FWS SS  
**Prerequisite:** None.  
 An introductory course in the study of unit record equipment and electronic computers for the student who does not plan to pursue the degree in data processing. No previous knowledge or experience in data processing is required.
- EDP 106 **Assembly Language** 4 (3-2) S  
**Prerequisite:** EDP 104.  
 The study of symbolic computer languages with emphasis on a particular example of such a language. The student will develop program logic and write programs using assembly language to solve appropriate assigned problems.

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- EDP 108 **Systems and Procedures** 3 (3-0) S  
**Prerequisite:** EDP 104.  
An introductory course in the principles of management systems applied to information data flows. Particular attention is given to forms design, flowcharting, forms analysis and design and systems analysis.
- EDP 200 **Computer Systems I** 3 (2-2) F  
**Prerequisites:** EDP 104, 108.  
A study of computer systems involving such concepts of architecture and/or programming as channels, interrupts, multiprogramming, job scheduling, file devices and file organization.
- EDP 201 **Computer Systems II** 3 (2-2) W  
**Prerequisite:** EDP 200.  
A study of computer systems involving such concepts as architecture and/or programming for operating systems, job control language, resident packs, teleprocessing and system utilities.
- EDP 202 **Data Processing Applications I** 4 (3-2) F  
**Prerequisite:** EDP 103.  
This course is designed to provide the student with sufficient knowledge in computer methodology to permit the use of computers in business. Emphasis will center around the computer environment with an in-depth study of the integration of the computer within business and industry.
- EDP 203 **Data Processing Applications II** 4 (3-2) W  
**Prerequisite:** EDP 202.  
This course emphasizes the preparation and utilization of operations data used in a typical business. Case problems involving systems established for collection of data, and generating information for organizational units are studied. Audit trails enabling the tracing of transactions back to the original source or forward to the first report are analyzed. Simulated data are used to demonstrate programming techniques (using COBOL) required in process management information. Statistical analysis programming using a scientific language is studied as an aid to business decision making.
- EDP 210 **User Programs Analysis** 3 (2-2) S  
**Prerequisite:** EDP 208.  
A study of the documentation, applications and uses of various user-supplied programs.
- EDP 215 **Computer Language Survey** 3 (2-2) W  
**Prerequisite:** EDP 103.  
A survey and comparison of various computer languages. Students will write and execute basic programs in several computer languages.

EDP 216 **Data Processing Research Project** 5 (1-8) S  
**Prerequisite:** EDP 203.

Individual assignments of a carefully selected project will be the work of the student during the quarter. The student will initiate and carry out a practical project from outside the textbooks. This course tests the ability of the student to plan and carry out the solution of a problem of computer application with a minimum of guidance.

### ELECTRONICS

ELN 1102 **Vacuum Tubes & Solid State Devices** 9 (4-15) W  
**Prerequisite:** ELC 1112, MAT 1115.

An introduction to vacuum tubes and their development; the theory, characteristics and operation of vacuum diodes, semiconductor diodes, rectifier circuits, filter circuits, triodes and simple voltage amplifier circuits. Transistor theory, operation, characteristics and their application to audio and radio frequency amplifier and oscillator circuits. Trouble shooting and repair of solid state devices.

ELN 1103 **Radio Receiver & Amplifier Servicing** 8 (4-12) S  
**Prerequisite:** ELN 1102.

An introduction to commonly used servicing techniques as applied to monophonic and stereophonic high fidelity amplifier systems and auxiliary equipment. The operation and servicing of inter-communication amplifiers and switching circuits will also be taught. Principles 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 1104 **Television Theory & Circuits I** 6 (4-6) S  
**Prerequisite:** ELN 1102.

This is a beginning theory course which introduces the study of the following: brightness control and DC re-insertion circuits, video detector stages, automatic frequency control circuits, picture IF amplifier stages and RF tuner units, etc. Shop work will include construction, analysis, testing and simple trouble-shooting of the stages studied in class. Visual alignment and adjustments of control circuits are performed.

ELN 1105 **Television Theory & Circuits II** 15 (9-18) SS  
**Prerequisite:** ELN 1104.

A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of 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. Additional study

of more specialized servicing techniques and oscilloscope waveform analysis will be used in the adjustment, trouble-shooting and repair of color television circuits.

ELN 1106 **Trouble-Shooting Techniques** 4 (2-6) W  
**Prerequisite:** ELC 1112.

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.

### PRE-ENGINEERING

EGR 101 **Engineering Graphics I** 3 (2-2) F  
**Prerequisite:** None.

The theory of graphically representing and solving spatial problems. Emphasis is placed on the development of a logical and analytical approach to problem solution. Conventional methods of graphically describing size and shape are introduced.

EGR 102 **Engineering Graphics II** 3 (2-2) S  
**Prerequisite:** EGR 101.

The theory of graphically representing engineering data and then solving for any relationships that exist for that data. Material presented includes Vector geometry, curve fitting, rate problems and graphical calculus.

### ENGLISH

ENG 101 **Grammar and Composition I** 3 (3-0) F  
**Prerequisite:** Satisfactory score on Placement Test.

The course places emphasis throughout on exercises in writing, speaking, and listening. Analysis is made of each student's strengths and weaknesses. The instruction is geared principally to helping students improve skills in areas where common weaknesses are found. This course offered only for the technical students.

ENG 102 **Grammar and Composition II** 3 (3-0) W  
**Prerequisite:** ENG 101.

Continuation course. Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph, whole composition and research techniques. This course offered only for the technical students.

ENG 103 **Report Writing** 3 (3-0) S  
**Prerequisite:** ENG 102.

The fundamentals of English are utilized as a background for organization and techniques of modern report writing. Exercises

in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in the student's chosen curriculum.

- ENG 109 **Grammar and Introduction to Composition\*\*** 3 (0-5) FWS SS  
**Prerequisite:** None.  
**Corequisite:** RDG 100, if satisfactory score is not reached on the Reading section of the English placement test.  
 A study of standard grammar and usage; fundamentals of paragraph development; class discussion of selected readings and films.
- ENG 110a **English Composition I** 3 (3-2) FWS SS  
**Prerequisite:** ENG 109, or satisfactory score on the Sentences section of the English placement test.  
**Corequisite:** RDG 100, if satisfactory score is not reached on the Reading section of the English placement test.  
 A study of standard grammar and usage, paragraph development, written composition, selected readings for class discussion; laboratory work if needed.
- ENG 110 **English Composition I** 3 (3-0) FWS SS  
**Prerequisite:** Satisfactory score on the Sentences section of the English placement test, or ENG 109.  
**Corequisite:** RDG 100, if satisfactory score is not reached on the Reading section of the English placement test.  
 Grammar, paragraph development, written composition, selected readings for discussion.
- ENG 111 **English Composition II** 3 (3-0) FWS SS  
**Prerequisite:** ENG 110 or ENG 110a.  
 Argumentative and critical essay composition, selected readings for discussion, research techniques, research paper.
- ENG 112 **English Composition III** 3 (3-0) FWS SS  
**Prerequisite:** ENG 111 or approved advanced placement.  
 A continuation of ENG 111. Consideration of short stories, plays and poetry as models of literary style. Writing in depth.
- ENG 140 **Business English** 3 (3-0) W  
**Prerequisite:** Admission to one year secretarial program.  
 An intensive study of grammar, usage, sentence structure, punctuation, and vocabulary.
- ENG 205 **Major British Writers I** 3 (3-0) F  
**Prerequisite:** ENG 112.  
 Major works of English literature of the Old and Middle English

\*\* Credit granted toward the Associate-in-General Education degree only; not designed for transfer credit.

periods and of the Renaissance. Substantial readings in Beowulf, Chaucer, Shakespeare, Milton, and Donne.

- ENG 206 **Major British Writers II** 3 (3-0) W  
**Prerequisite:** ENG 112.  
 Major works of English literature from the Restoration through the nineteenth century. Substantial readings in Pope, Swift, Blake, Wordsworth, Shelley, Keats, Tennyson, Browning, Arnold, and Dickens.
- ENG 207 **Major British Writers III** 3 (3-0) S  
**Prerequisite:** ENG 112.  
 Major works of English literature of the twentieth century. Readings by Conrad, Yeats, Joyce, Woolf, Lawrence, Eliot, Thomas, Huxley, Orwell, and Becket.
- ENG 208 **Major American Writers I** 3 (3-0) F SS  
**Prerequisite:** ENG 112.  
 Major works of American literature from 1800 to 1900. Substantial readings in Hawthorne, Poe, Melville, Emerson, Thoreau, Longfellow, Whitman, Dickinson, Twain, and Crane.
- ENG 209 **Major American Writers II** 3 (3-0) W SS  
**Prerequisite:** ENG 112.  
 Major works of American literature from 1900 to World War II. Substantial readings in Dreiser, Frost, Sandburg, Mencken, Fitzgerald, Anderson, Lewis, O'Neill, Eliot, Wolfe, Faulkner, and Hemingway.
- ENG 210 **Major American Writers III** 3 (3-0) S SS  
**Prerequisite:** ENG 112.  
 Major works of American literature from World War II to the present. Substantial readings in Faulkner, Hemingway, Steinbeck, Williams, Miller, Baldwin, Wright, O'Connor, Welty, Jeffers, and Jarrell.
- ENG 211 **Advanced Composition** 3 (3-0)\*  
**Prerequisite:** ENG 111.  
 Effective organization and presentation of information and ideas, mainly through the writing of extended essays of exposition, argument, description, narration, and criticism. Some work with the precis and the paraphrase.
- ENG 212 **World Masterpieces in Translation I** 3 (3-0) F  
**Prerequisite:** ENG 112.  
 Significant works from the earliest Greek writings through the Renaissance. Substantial readings in Homer, Aristotle, Aeschylus, Sophocles, Aristophanes, Thucydides, Vergil, Dante, Petrarch, Castiglione, Machiavelli, Montaigne, and Cervantes.

\* Course offered (alternate years) based upon demand.

- ENG 213 **World Masterpieces in Translation II** 3 (3-0) S  
**Prerequisite:** ENG 112.  
 Significant works after 1600. Substantial readings in Moliere, Racine, Voltaire, Rousseau, Goethe, Balzac, Flaubert, Turgenev, Dostoevsky, Tolstoy, Baudelaire, Lorca, Gide, Proust, Sartre, and Brandao.
- ENG 214 **Studies in Poetry** 3 (3-0) F SS  
**Prerequisite:** ENG 112.  
 Exploration of the significance of poetry for thought and human experience. A thematic study of poetic styles. Substantial readings in early ballads, Spenser, Sidney, Shakespeare, Donne, Marvel, Pope, Blake, Dickinson, Swinburne, Stevens, Pound, Eliot, Cummings, Auden, Thomas, Roethke, Spender, Lowell, Dickey, and other contemporary poets.
- ENG 215 **Studies in Fiction** 3 (3-0) W SS  
**Prerequisite:** ENG 112.  
 Discriminating reading for pleasure. Several novels and short stories to be selected from a variety of popular and serious writers such as Malamud, Kosinski, Kesey, Camus, Baldwin, Salinger, and Vonnegut.
- ENG 216 **Black Literature** 3 (3-0) S SS  
**Prerequisite:** ENG 112.  
 Major works of black writers. Substantial readings in Wright, Baldwin, Hughes, McKay, Johnson, Cullen, Ellison, Cleaver, Brown, Brooks, Jones, and Van Peebles.
- ENG 217 **Modern Drama** 3 (3-0) W SS  
**Prerequisite:** ENG 112.  
 Major plays from 1890 to the present. Close readings of selected plays by Ibsen, Strindberg, Chekhov, Gorki, Molnar, Pirandello, Rostand, Lorca, Shaw, Synge, O'Neill, Williams, Miller, Albee, Anouilh, Ionesco, and Becket.
- ENG 218 **Creative Writing** 3 (3-0) S  
**Prerequisite:** Permission of instructor.  
 Beginning workshop in fiction and poetry. Students submit their work for evaluation and criticism. Informal class discussion of student work. Limited to 15 students.
- ENG 219 **Film Criticism I** 3 (2-2) W  
**Prerequisite:** None.  
 The American Film. The beginning of commercial film-making, the development of sound film, the development and evolution of the Western film, the development and evolution of the animated film, early and modern musical films, the American film as propaganda, and the film as a deliberate attempt at creating an artistic masterpiece. Humanities elective. Nine full-length films will be shown.

- ENG 220 **Film Criticism II** 3 (2-2) S  
**Prerequisite:** None.  
 The Foreign Film. A study of techniques of cinematography used by foreign filmmakers; the development of techniques of film criticism. Nine full-length foreign films that have had a major effect on the art of film-making will be viewed and discussed. Humanities elective.
- ENG 1104 **Effective Communications** 3 (3-0) WS  
**Prerequisite:** RDG 100 or satisfactory score on the Reading section of the English placement test.  
 This course has been designed to promote effective communication through correct language usage in speaking and writing. Special attention will be given to the more troublesome elements of the business letter and job application forms.

### FRENCH

- FRE 101 **Elementary French I** 5 (5-2) FW SS  
**Prerequisite:** Satisfactory score on college placement tests.  
 An introduction to French, with a modern audiolingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. For those with no previous French or those who do not make a satisfactory score on the French Placement Test.-
- FRE 102 **Elementary French II** 5 (5-2) WS SS  
**Prerequisite:** FRE 101.  
 A continuation of FRE 101.
- FRE 151 **Intermediate French I** 5 (5-2) FS  
**Prerequisite:** Two units of high school French and a satisfactory placement test score, or FRE 101 and FRE 102.  
 A review of the skills of hearing, speaking, reading and writing. Audiolingual work in class and in lab. Selected supplementary readings.
- FRE 152 **Intermediate French II** 5 (5-2) FW  
**Prerequisite:** FRE 151.  
 A continuation of FRE 151.
- FRE 201 **Survey of French Civilization** 5 (5-1) S  
**Prerequisite:** FRE 152.  
 A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.
- FRE 202 **Conversational French** 5 (5-1) W\*  
**Prerequisite:** FRE 152 or equivalent.  
 A systematic study of French with a stress on oral skills, listening and speaking. Composition and reading also included.

\* Course offered based upon demand.

### HISTORY

- HIS 110 **Western Civilization I** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 An intensive survey of the forces responsible for the making of modern Europe from 1500 to 1815, with background drawn from the ancient and medieval western world. Among the forces considered: the Renaissance; Reformation; Commercial, Agricultural and Industrial Revolutions; Constitutional Government in England, Eighteenth Century thought; Imperialism, the French Revolution.
- HIS 111 **Western Civilization II** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A study of the European civilization from the Congress of Vienna. Special attention given to the rise and fall of nazism and fascism, to the development of communism and capitalism, and to the cold war.
- HIS 151 **United States History I** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A survey of the history of the United States from the discovery of America in 1492 to the end of the Civil War in 1865. Emphasis on the political, economic, social, and cultural developments of the Republic.
- HIS 152 **United States History II** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A survey of the history of the United States from 1865 to present. Emphasis on the economic development and the rise of the United States as a world power.
- HIS 153 **Afro-American History** 5 (5-0) S  
**Prerequisite:** None.  
 An extensive study of the Afro-American from his African and European backgrounds through colonial America to the present. Special attention will be given to the effect of the transplantation of the African (slavery) to the new world, segregation, and racism on the personality and destiny of the Afro-American. Emphasis will be placed on the Afro-American's contributions, slave revolts, and the contemporary civil, social, and cultural movements.

### HORTICULTURE

- HOR 111 **Principles of Horticulture** 6 (3-9) F  
**Prerequisite:** Admission to Landscape Gardening Curriculum.  
 An orientation to facilities, terminology, and practices used in landscape gardening. Introduction to future horticultural topics which will be discussed more thoroughly in future courses. Practical laboratory exercises will be designed to familiarize the student with basic gardening procedures.

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- HOR 125 **Arboriculture** 4 (3-3) W  
**Prerequisite:** HOR 111 or approval of counselor.  
The culture and maintenance of trees and shrubs including fertilizing, pruning, and repair.
- HOR 126 **Fertilizers** 3 (3-0) W  
**Prerequisite:** HOR 111 or approval of counselor.  
Understanding the value of nutrients on plant growth and how adequate soil nutrient levels can be maintained through the use of fertilizers and lime. A study of the chemical composition, availability, and cost of fertilizers. Students will analyze and determine the proper fertilization applications for ornamental plants.
- HOR 127 **Greenhouse Operations** 3 (3-1) W  
**Prerequisite:** HOR 111 or approval of counselor.  
A basic study of principles and procedures involved in the operation and maintenance of greenhouse facilities.
- HOR 128 **Soil Science** 2 (1-2) W  
**Prerequisite:** HOR 111 or approval of counselor.  
The study of the physical and chemical properties of the soil and how they relate to plant growth. Special emphasis will be placed on analyzing soil samples with regards to soil texture, porosity, pH, and soil nutrition.
- HOR 131 **Plant Materials I** 3 (2-2) S  
**Prerequisite:** None.  
A basic understanding of plant nomenclature and terminology. The identification of selected ornamental plants with special emphasis on plant characteristics and growth requirements as pertains to various landscape situations.
- HOR 132 **Plant Propagation I** 4 (3-3) S  
**Prerequisite:** HOR 127.  
An introduction to principles and applied techniques of propagation with emphasis on actual production of bedding and vegetable plants from seed.
- HOR 133 **Spring Gardening Laboratory** 2 (0-5) S  
**Prerequisite:** HOR 126.  
**Corequisite:** HOR 135.  
The utilization and application of horticultural principles studied in the classroom.
- HOR 134 **Resident Practicum I** 1 (0-12) S  
**Prerequisite:** HOR 127.  
Each student will be assigned to maintain and supervise specific projects in the greenhouses and on campus property. Projects assigned to the student will vary depending upon the season of the year.

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| HOR | 135 | <b>Turfgrass Culture</b><br><b>Prerequisites:</b> HOR 126, HOR 128.<br>The study of turf varieties, their characteristics, and the situation for which they are best adapted. Culture and care of public and private lawn areas such as: residential lawns and golf courses. The use and maintenance of equipment which is essential for producing high quality turf. | 4 (3-3) S   |
| HOR | 141 | <b>Landscape Design I</b><br><b>Prerequisite:</b> HOR 131.<br>A study of the history and principles of landscape design. Proper methods and procedures for drawing landscape plans will be emphasized. Selected landscape situations will be planned by the students, stressing the proper selection and placement of plant material for each plan.                   | 5 (3-6) SS  |
| HOR | 142 | <b>Pest Control</b><br><b>Prerequisites:</b> HOR 131, HOR 135.<br>The collection, identification, and study of plant pests including insects, diseases, and weeds. Methods of preventing or controlling plant pests through the use of cultural, biological, and chemical controls.   | 3 (3-1) SS  |
| HOR | 143 | <b>Plant Materials II</b><br><b>Prerequisite:</b> HOR 131.<br>A continuation of HOR 131.  | 3 (2-2) SS  |
| HOR | 144 | <b>Resident Practicum II</b><br><b>Prerequisites:</b> HOR 134, HOR 135.<br>Each student will be assigned to maintain and supervise specific projects in the greenhouses and on campus property. Projects assigned to the student will vary depending upon the season of the year.   | 1 (0-12) SS |
| HOR | 145 | <b>Summer Gardening Laboratory</b><br><b>Prerequisite:</b> HOR 133.<br>The utilization and application of horticultural principles studied in the classroom.  | 3 (0-8) SS  |
| HOR | 211 | <b>Greenhouse Production I</b><br><b>Prerequisite:</b> HOR 127.<br>Students will initiate and manage selected greenhouse crops. Emphasis will be placed on factors affecting proper timing and ultimate cost of each specific crop.   | 4 (3-4) F   |
| HOR | 212 | <b>Nursery Operations</b><br><b>Prerequisite:</b> HOR 131.<br>An introduction to the nursery industry and its role in the field of horticulture. Operations and functions of nurseries and garden centers will be discussed. Physical operations including winter protection, balling and burlapping, containerized growing, and field production will be practiced.  | 4 (3-4) F   |

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| HOR | 213 | <b>Plant Propagation II</b><br><b>Prerequisite:</b> HOR 132.<br>A continuation of propagation principles and techniques covered in HOR 132. Emphasis will be placed on asexual methods of plant propagation.  | 4 (3-3) F  |
| HOR | 214 | <b>Plant Materials III</b><br><b>Prerequisite:</b> HOR 143.<br>A continuation of HOR 143.   | 3 (2-2) F  |
| HOR | 215 | <b>Resident Practicum III</b><br><b>Prerequisite:</b> HOR 144.<br><b>Corequisite:</b> HOR 211.<br>Each student will be assigned to maintain and supervise specific projects in the greenhouses and on campus property. Projects assigned to the student will vary depending upon the season of the year.  | 1 (0-12) F |
| HOR | 220 | <b>Greenhouse Production II</b><br><b>Prerequisite:</b> HOR 211.<br>The study and management of certain crops initiated in HOR 211 plus the initiation of additional greenhouse crops based on seasonal marketing demand. Each student will be responsible for managing and reporting on specific crops.  | 4 (3-4) W  |
| HOR | 221 | <b>Grounds Maintenance</b><br><b>Prerequisites:</b> HOR 125, 126, 141, 142, 211, 214.<br>The development of a complete grounds maintenance program. The student will determine the equipment, supplies, manpower, and cost necessary to implement a maintenance program on a selected site.   | 5 (4-2) W  |
| HOR | 222 | <b>Landscape Design II</b><br><b>Prerequisite:</b> HOR 141.<br>Further development of landscape design skills in creating complete landscape plans. The utilization of plants and construction materials will be considered in the developing of selected landscape situations. The relationship of designer, contractor, and client will be discussed. | 5 (3-6) W  |
| HOR | 223 | <b>Plant Materials IV</b><br><b>Prerequisite:</b> HOR 214.<br>A continuation of HOR 214.  | 3 (2-2) W  |
| HOR | 224 | <b>Seminar</b><br><b>Prerequisite:</b> None.<br>Selected topics of horticultural interest to be presented by instructors, students, and resource speakers. Areas of special interest will include planning and scheduling of jobs, estimating job cost, contract agreements, budgeting, public relations, and the selection of equipment.               | 3 (3-0) W  |

- HOR 229 **Resident Practicum IV** 1 (0-12) W  
**Prerequisite:** HOR 215.  
 Each student will be assigned to maintain and supervise specific projects in the greenhouses and on campus property. Projects assigned to the student will vary depending upon the season of the year.
- HOR 231 **Apprenticeship** 4 (0-40) S  
**Prerequisite:** For Landscape Gardening Degree candidates only. One quarter "on-the-job" training in a plant related situation approved by the faculty of landscape gardening. Approved situations will include estates, public gardens, golf courses, nurseries, greenhouses, florist shops, and related situations.

### HUMAN RESOURCE DEVELOPMENT

- HRD 100 **Introduction to the Field of Human Resources** 5 (4-3) F  
**Prerequisite:** Admission to the Human Resource Development program.  
 An overview of current trends in the field of human resource development and the role of the associate on the human service team. Emphasis is given to the comprehensive community approach to mental health, education, mental retardation, rehabilitation, and to the introduction of the student to the various disciplines and professionals who work within the field.
- HRD 101 **Social and Group Processes I** 2 (1-3) F  
**Prerequisite:** Admission to the Human Resource Development program.  
 The beginning phase of a three quarter exposure to small groups will closely simulate an encounter group experience. The setting will most likely be a marathon week end. The laboratory method of learning without a text will be used during this first quarter. The practice of interpersonal and communication skills along with studying the processes which occur in a small group will be the basis of the learning experience.
- HRD 102 **Social and Group Processes II** 2 (1-3) W  
**Prerequisite:** HRD 101.  
 The second phase of group involves examining interpersonal relations from a more academic point of view. The method of study is still the laboratory method conducted in a marathon setting. Texts and readings will be used during this phase.
- HRD 103 **Social and Group Processes III** 2 (1-3) S  
**Prerequisite:** HRD 102.  
 The last phase of group is a mixture of a non-structured training group experience and more sophisticated readings concerning interpretations of group and social process. A marathon setting will be utilized to conclude these objectives.

- HRD 205 **Internship in Human Resource Development 6 (0-40) W**  
**Prerequisites:** HRD 101, HRD 251, SOC 213, PSY 210.  
 An eleven week assignment in a human service agency to acquaint the student with the philosophy, procedures, and day-to-day operations of such agencies. The student observes and participates in staff meetings, interviews, patient care, and agency planning under the supervision of a faculty member and a member of the staff of the participating agency. The student submits a written report at the end of the internship.
- HRD 206 **Human Resources Seminar 3 (3-0) S**  
**Prerequisite:** HRD 205 or permission of instructor.  
 The seminar will emphasize the problems and difficulties the student encountered during his internship. An attempt will be made to integrate theories and concepts and their common application to all human service agencies. Each student will be responsible for leading an in-depth discussion of current issues and trends within the human service field.
- HRD 207 **Area of Specialization 3 (3-0) S**  
**Prerequisite:** HRD 205 or permission of department chairman.  
 The student will be expected to research his area of specialty and, where possible, prepare an intensive case study in consultation with his instructor.
- HRD 251 **Field Placement I 1 (0-3) F**  
**Prerequisite:** Admission to the Human Resource Development program.  
 This assignment will acquaint the student with the philosophy and operational structure of the agency with which he is placed and the types of clients those agencies serve. His activities with the agency are designed not only to aid him in the development of skills and to apprise him of the role of the human resource associate in the agency, but also to allow him to begin to make a specific career choice.
- HRD 252 **Field Placement II 1 (0-3) S**  
**Prerequisites:** HRD 205, HRD 251.  
 Designed as an opportunity for the advanced human resource associate to demonstrate his skills as a team member within a specific human service agency. Particular skills the student should be utilizing will include: interviewing, counseling, group work, intra-agency staff planning, and inter-agency liaison services.

### INTERDISCIPLINARY STUDIES

- IDS 201 **Women in Perspective 5 (5-0) S**  
**Prerequisite:** None.  
 An interdisciplinary introduction to the study of women: their images, roles and status in the past and present, with emphasis

on the present. Areas of study in history, literature, fine arts, economic activity and in sociology (changing roles of the family).

### JOURNALISM

- JOU 110 **Introduction to Mass Communication** 3 (3-0) F  
**Prerequisites:** Satisfactory score on English placement test or RDG 100.  
 An introduction to the complexities of the mass media and the effects of mass communication; a study of the media forms, media content, and media environments.
- JOU 111 **Reporting and Newswriting I** 3 (3-0) W  
**Prerequisites:** Satisfactory grades on ENG 110 and BUS 102.  
 A functional approach to understanding, gathering, and writing news. Extensive drill in writing leads and bodies of news stories. Studies of models from current newspapers.
- JOU 112 **Reporting and Newswriting II** 3 (3-0) S  
**Prerequisite:** JOU 111.  
 A continuation of Journalism III. Reporting in depth. Learning newspaper style with added drill in writing. Sports reporting.
- JOU 201 **Makeup, Editing Copy and Proof** 3 (3-0) S  
**Prerequisite:** JOU 112.  
 Learning to edit copy; practice in writing headlines; fitting advertisements into newspapers and magazines; understanding typography and production; making up pages; reading proof.
- JOU 202 **Feature Writing** 3 (3-0) F  
**Prerequisite:** JOU 201, PHO 110.  
 Analysis of what characterizes feature stories; determining what it takes to make a good feature writer; determining various types of such stories with a study of examples; written assignments based on individual interests; use of photographs to complement feature.
- JOU 203 **Column and Editorial Writing** 3 (3-0) W  
**Prerequisite:** JOU 204.  
 Writing editorials after studying the place they occupy in today's collegiate and other publications. Coming to know better the purposes and types of editorials. Preparing to write editorials, writing them, checking, and headlining. A consideration of various types of column writing and making a choice based on personal interest and knowledge.
- JOU 204 **Supervised Work Experience** 10 (0-30) S  
**Prerequisite:** JOU 203 or JOU 212.  
 Supervised work experience in broadcasting or newspaper. Students will be introduced to the practical aspects of offset printing, news reporting, writing, editing, layout, broadcasting, and photography. A written report of the work experience will be required.

- JOU 205 **Journalism Seminar** 2 (2-0) S  
**Prerequisite:** JOU 203 or JOU 212.  
**Corequisite:** JOU 204.  
 A seminar devoted to the discussion and analysis of the supervised work experience.
- JOU 210 **Broadcasting I** 3 (3-0) SS  
**Prerequisites:** SPH 101 and JOU 112.  
 An introduction to the techniques of radio announcing, including reading, voice and diction, breath control, and dramatic reading.
- JOU 211 **Broadcasting II** 3 (3-0) F  
**Prerequisite:** JOU 210.  
 A continuation of JOU 210.
- JOU 212 **Broadcasting III** 3 (3-0) W  
**Prerequisite:** JOU 211.  
 A continuation of JOU 211.

### MATHEMATICS

- MAT 020 **Structure of Arithmetic** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A course designed to help the student gain and improve basic computational skills. A greater understanding of the nature of "number" and "operation" is also a major objective.
- MAT 022 **Elementary Algebra I** 5 (5-5) FWS SS  
**Prerequisite:** None.  
 A course designed to provide the student with the basic understandings and manipulative skills of elementary algebra. This course carries credit toward the Associate in General Education Degree but is not suitable for transfer.
- MAT 023 **Geometry** 5 (5-5) FWS SS  
**Prerequisite:** None.  
 A course for students without geometry background designed to provide the student with the fundamentals of plane geometry. This course carries credit toward the Associate in General Education Degree but is not suitable for transfer.
- MAT 025 **Pre-College Algebra II — Part 1** 5 (5-2) FWS SS  
**Prerequisites:** Algebra 1 or equivalent and satisfactory score on placement test.  
 A course designed to help students acquire the theory and skills which are prerequisites for college algebra. This course carries credit toward the Associate in General Education Degree but is not suitable for transfer.

- MAT 026 **Pre-College Algebra II — Part 2** 5 (5-0) FWS SS  
**Prerequisite:** MAT 025.  
 A continuation of MAT 025. This course carries credit toward the Associate in General Education Degree but is not suitable for transfer.
- MAT 103 **Basic Concepts of Mathematics I** 5 (5-0) FWS SS  
**Prerequisites:** Algebra 1 and satisfactory score on math placement test or MAT 022.  
 A study of sets, relations, mappings, elementary logic, truth tables, and numeration. Primarily designed for elementary education students, although it may also meet the requirement for liberal arts majors at some senior institutions.
- MAT 104 **Basic Concepts of Mathematics II** 5 (5-0) FWS SS  
**Prerequisite:** MAT 103 or approved advanced placement.  
 A course in descriptive geometry of two or three dimensions. Some deductive proofs of theorems and simple compass and straight-edge constructions are studied along with many definitions and intuitive notions.
- MAT 110 **College Algebra** 5 (5-0) FWS SS  
**Prerequisites:** Algebra II or equivalent and satisfactory score on math placement test, with Geometry recommended.  
 Designed for math or non-math majors. Stresses properties of numbers, elementary set theory, function concept, graphic methods for polynomial and rational functions, inequalities, systems of equations, and matrices and logarithms.
- MAT 115 **Practical Methods of Measurement** 3 (3-0) W  
**Prerequisite:** Satisfactory score on placement test.  
 This course is designed to provide students with the theoretical and practical knowledge of mathematics needed in the field of horticulture. Initial work in the course centers around fundamental principles and skills of arithmetic but evolves into more advanced notions and practices involving some algebra and trigonometry. Heavy emphasis is given to the meanings and methods of mensuration and to the use of data tables. As many opportunities as possible will be provided for the student to put these concepts into practical use.
- MAT 120 **College Trigonometry** 5 (5-0) FWS SS  
**Prerequisite:** MAT 110 or approved advanced placement.  
 Develops the analytical approach in studying the trigonometric functions using rectangular and polar coordinates, periodicity and basic graphs, trigonometric identities and equations, multiple angle formulas, inverses of trigonometric functions, logarithms, and solutions of triangles.
- MAT 125 **Statistics** 3 (3-0) W  
**Prerequisite:** MAT 110.  
 The purpose of this course is to provide a practical foundation

upon which data processing problem-solving can be based. A brief treatment of descriptive statistics, with an emphasis on tests of significant differences or significant correlations between groups with research uses. Packaged computer programs (BMD, TSAR, SPSS, and particularly MANOVA) will be utilized.

- MAT 131 **Technical Mathematics I** 5 (5-0) F  
**Prerequisite:** Entrance Requirements.  
 A review of the real number system. Also studied are rules of exponents, approximate numbers, and some simple uses of the slide rule. Early introduction to trigonometry functions and the use of trigonometry tables is followed by work in the solution of right triangles. Included is a review of algebraic operations.
- MAT 132 **Technical Mathematics II** 5 (5-0) W  
**Prerequisite:** MAT 131 or advanced placement.  
 An introduction to solution methods for simultaneous equations including elimination and determinants. Logarithms to base 10 and base e, with use of tables will be studied and followed by practical examples involving the use of logarithm operations. Solution of oblique triangles using the sine and cosine laws. Graphs of algebraic and trigonometric functions will be included as well as introduction to vectors.
- MAT 133 **Technical Mathematics III** 5 (5-0) S  
**Prerequisite:** MAT 132 or equivalent.  
 A study of vectors will be taken up in the early part of the course. Analytical geometry of the plane is studied with emphasis on lines and the conic sections. Introduction of the differential calculus from the limit concept and delta notation continuing through the use of formulas to find derivatives of polynomials, and trigonometric and logarithmic functions. Emphasis will be placed on inclusion of applications from civil and architectural engineering.
- MAT 149 **Elementary Functions** 5 (5-0) F  
**Prerequisites:** High school algebra I, II, and geometry.  
 Course consists of combined study of algebraic and trigonometric functions. Students planning to major in math, physics, or engineering should take this course instead of the usual sequence of MAT 110, 120, if possible.
- MAT 150 **Analytical Geometry and Calculus I** 5 (5-0) FWS SS\*  
**Prerequisite:** MAT 120 or advanced placement.  
 Includes an introduction to analytic geometry, functions, limits, derivatives, and integration.
- MAT 201 **Analytical Geometry and Calculus II** 5 (5-0) FWS  
**Prerequisite:** MAT 150.  
 Derivatives of trigonometric functions. Graphs of conic sec-

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\* Course offered based upon demand.

- tions. Maxima and minima problems. Applications of integration methods.
- MAT 202 **Analytical Geometry and Calculus III** 5 (5-0) WS  
**Prerequisite:** MAT 201.  
 Exponential and logarithmic functions, plane curves, polar coordinates, integration techniques, and hyperbolic functions.
- MAT 203 **Analytical Geometry and Calculus IV** 5 (5-0) S  
**Prerequisite:** MAT 202.  
 Three dimensional analytic geometry, differential calculus of functions of several variables, multiple integration.
- MAT 220 **Differential Equations** 5 (5-0) FWS SS\*  
**Prerequisite:** MAT 203.  
 A study of the solution of ordinary differential equations, first order equations, linear equations of any order, series solutions and applications.
- MAT 1101 **Automotive Mathematics I** 5 (5-0) F  
**Prerequisite:** Acceptance into vocational program.  
 Practical number theory/analysis of basic operations; addition, subtraction, multiplication and division of whole numbers. Fractions and decimals. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.
- MAT 1112 **Building Trades Mathematics I** 3 (0-3) FS  
**Prerequisite:** Admission to carpentry curriculum.  
 This course emphasizes basic operation of addition, subtraction, multiplication and division of whole numbers and fractions as needed in the building trades. Ratio, proportions, geometry, and measurement will be studied as they apply to mensuration problems in the construction industry. The working of practical problems will be stressed throughout the course.
- MAT 1113 **Building Trades Mathematics II** 2 (0-2) W SS  
**Prerequisite:** MAT 1112.  
 A continuation of Math 1112 with additional emphasis on student involvement in solving real problems of the building trades. Basic estimation practices will be studied in terms of costs of building materials, labor, and in projecting completion dates for projects.
- MAT 1115 **Electrical Mathematics I** 5 (5-0) F  
**Prerequisite:** Acceptance into Vocational Program.  
 An introductory course including algebraic operations of addition, subtraction, multiplication and division; use of letters and signs, grouping, factoring; exponents; ratios and proportions; algebraic solutions of first-degree equations. Study of Ohm's Law for series, parallel and combination circuits; powers of 10.

MAT 1116 **Electrical Mathematics II** 5 (5-0) W  
**Prerequisite:** MAT 1115.

A study of square roots, electrical power, Kirchoff's Laws, voltage dividers, inductance, and capacitance. Emphasis given to applications.

MAT 1120 **Automotive Mathematics II** 3 (3-0) W  
**Prerequisite:** MAT 1101.

Practical problems especially selected to ensure mastery of mathematics principles applied to the automobile trades. Topics covered include the metric system, percentages, and ratio and proportion.

### MEDICAL LABORATORY TECHNOLOGY

MLT 110 **Introduction to Medical Laboratory  
Technique I** 2 (2-0) F  
**Prerequisite:** None.

An orientation course concerning the scope of medical laboratory technology and the role of the medical laboratory technician in the hospital. Instruction will include lecture-seminar presentations by the instructor, films designed for introduction to laboratory medicine, trips to nearby clinical laboratory facilities, and introductory discussions and lectures on medical terminology.

MLT 111 **Introduction to Medical Laboratory  
Technique II** 2 (2-2) W  
**Prerequisite:** MLT 110.

A continuation of MLT 110. Topics include medical terminology; medical laboratory math; use and care of glassware, reagents, instruments; and quality control. Emphasis in the laboratory will include calibration of volumetric glassware, specimen collection, and other manipulative skills. Some lab sessions will deal with practice of lab, math problems.

MLT 112 **Medical Laboratory Instrumentation** 3 (2-3) S  
**Prerequisite:** MLT 111.

A study of the theory, principles of operation, and troubleshooting of modern clinical laboratory instruments. Instruction includes the operation and care of these instruments, as well as recognition of malfunctions and their solutions that can be applied by the laboratory technician. Laboratory sessions will emphasize the actual operation and troubleshooting, laboratory safety, and maintenance of Autoanalyzers, spectrophotometers, flame photometers, and blood gas analyzers.

MLT 201 **Hematology and Urinalysis** 3 (3-0) SS  
**Prerequisites:** MLT 101 and MLT 110.

A study of the physiology of the urinary and hemopoietic systems of humans; the morphology of urinary sediment and of

blood; normal and abnormal valves, and tests for determining them. Emphasis will be placed upon human disease processes of the kidneys and the blood.

- MLT 202 **Clinical Chemistry** 3 (3-0) F  
**Prerequisites:** MLT 101, MLT 110.  
 A study of the nature of antibodies and the principles of precipitation, agglutination, and flocculation and tests employing these principles; EKG theory and technique; the genetics of blood factors, ABO, Rh and other subgroups; and blood compatibility testing of donor and recipient.
- MLT 203 **Medical Microbiology** 3 (3-0) W  
**Prerequisites:** MLT 101, MLT 110.  
 A study of the physiology and morphology of medically important bacteria, fungi and parasites infecting man; safety procedures for studying microorganisms and sterilization techniques; and the methods for isolation and identification of these microorganisms or their antigens, including the preparation and use of various media.
- MLT 204 **Serology, Electrocardiogram, Blood Bank** 3 (3-0) S  
**Prerequisites:** MLT 101, MLT 110.  
 A study of the biochemical products involved in human metabolism, particularly carbohydrates, proteins, fats, and electrolytes, and quantitative procedures for determining those products, both normal and abnormal, that may be present in various body fluids; preparation and proper use of solutions and chemical reagents.
- MLT 211 **Laboratory Principles I** 9 (2-34) FWS SS  
**Prerequisite:** MLT 112.  
 Clinical experience in a medical laboratory under the supervision of a senior technologist and/or pathologist, observing, studying and performing routine techniques, tests, and procedures utilized in the urinalysis and hematology sections of a modern laboratory. Lectures on techniques and seminar discussions of weekly lab problems and concerns will be held on campus two hours per week by the MLT faculty.
- MLT 212 **Laboratory Principles II** 9 (2-34) FWS SS  
**Prerequisite:** MLT 211.  
 A continuation of MLT 211.
- MLT 213 **Laboratory Principles III** 9 (2-34) FWS SS  
**Prerequisite:** MLT 212.  
 A continuation of MLT 212.
- MLT 214 **Laboratory Principles IV** 9 (2-34) FWS SS  
**Prerequisite:** MLT 213.  
 A continuation of MLT 213.

## MUSIC

The courses offered by the Music Department are open to all students. However, courses below 110 are more readily adaptable to a limited background in music preceding the college level. Music courses beginning with MUS 111 require the accumulation of more musical knowledge and experience before college, and are basically designed for students who plan to major in music. There is no extra charge for music courses other than the regular college fees.

### Music Majors:

1. Each music major is required to have a major performance medium which may be chosen from the following: voice, keyboard, band or orchestral instruments.
2. An interview by and audition for the music faculty is required of all freshmen and transfer students.
3. Preparatory work without credit may be required of all students unable to meet entrance requirements on performing medium.
4. Students registering for any section of MUS 106 or MUS 206 are expected to perform for a music faculty committee at the end of each quarter. Students enrolled in MUS 105 will prepare for a faculty committee upon the advice of their instructor.
5. Placement tests in music theory will be given to all freshmen and transfer students to determine level at which study will begin.

MUS	100	<b>Learning To Read Music</b> <b>Prerequisite:</b> None. This course is designed to give beginning instruction in learning to read musical notation and rhythmic patterns. Both written and aural exercises are practiced in treble and bass clefs. The student is introduced to the piano keyboard and to elementary studies in sight-singing. It should be of special interest to persons who have sung and played but never learned to read music.	1 (2-0) FWS SS
MUS	101	<b>Music Appreciation I</b> <b>Prerequisite:</b> None (For non-music majors). A survey of the basic materials of music, its history, forms, and styles with emphasis on learning how to listen to music.	3 (3-1) FWS SS
MUS	102	<b>Music Appreciation II</b> <b>Prerequisite:</b> None (For non-music majors). A survey of the history and styles of music which is composed or has had its origin in the United States.	2 (2-1) FWS SS

- MUS 104 **Music Performance Laboratory** 1 (0-2) FWS  
**Prerequisite:** Permission of the instructor.  
 Designed to give students an opportunity to organize and participate in combos and instrumental groups. Instruction is specifically directed toward the dance and popular music fields.
- MUS 105 **Music Performance** 1 (1-5) FWS SS  
**Prerequisite:** Intermediate level of MUS 107 III or permission of the instructor through personal interview and/or audition.  
 Individual instruction in the sections listed. Designed for general college student. Also, provides instruction in secondary performing media for music majors. Student is expected to demonstrate a high level of musical performance and understanding. SECTIONS: A—Voice; B—Piano; C—Organ; D—Brass; E—Woodwinds; F—Strings; G—Percussion.
- MUS 106 **Music Performance** 2 (1-10) FWS SS  
**Prerequisite:** For Music Majors Only. Audition for instructor.  
 Individual instruction in the sections listed. Designed for advanced instruction and primarily for the music major. Must perform exam for faculty committee each quarter to receive credit. SECTIONS: A—Voice; B—Piano; C—Organ; D—Brass; E—Woodwind; F—Strings; G—Percussion.
- MUS 107 **Class Instruction in Music Performance** 1 (1-5) FWS SS  
**Prerequisite:** MUS 100 or permission of the instructor.  
 Beginning I, elementary II, and intermediate III, performance instruction in classes of each section. Emphasis is placed on the basic techniques of tone production and music reading. In some sections personal instruments will be required. After three (3) hours credit has been accrued in any given section, special permission of the instructor will be required for additional registration in the same section. SECTIONS: A—Voice; B—Piano; D—Brass; E—Woodwind; F—Strings; G—Percussion.
- MUS 108 **College Choir** 1 (0-2) FWS SS  
**Prerequisite:** Open to all students. Maximum of fifty voices.  
 This course covers a wide range of choral literature from simple folk songs to extended compositions in larger forms.
- MUS 109 **Concert Band** 1 (0-2) FWS  
**Prerequisite:** Perform adequately on an instrument used in the ensemble; Permission of the instructor.  
 The study and performance of music literature for band and wind ensemble. Presents concerts during the school year and performs at college and community functions.
- MUS 110 **Orchestra** 1 (0-2) FWS  
**Prerequisite:** Perform adequately on an instrument utilized in the ensemble; Permission of the instructor.  
 The performance of music for string ensembles and small or-

chestra. Group and/or groups makes public appearances during the school year. Open to all qualified persons.

- MUS 111 **Music Theory I** 5 (5-1) F  
**Prerequisite:** MUS 100 or demonstrate ability to read music.  
Designed to develop basic techniques in the fundamentals of music. A correlation of ear-training, sight-singing, manuscript, and harmony (both written and keyboard). Studies in notation, intervals, keys, scales, and triads with aural and oral performances in class by each student.
- MUS 112 **Music Theory II** 5 (5-1) W  
**Prerequisite:** MUS 111.  
Designed to utilize the basic musical tools and techniques learned in MUS 111. Analysis of harmonic and melodic motion in relation to musical composition techniques. Introduction to tonality with exercises in functional harmony. Intensified practice in ear-training and sight-singing. Foundation established for four-part harmonic writing, the modes, embellishing tones and voice leading.
- MUS 113 **Music Theory III** 5 (5-1) S  
**Prerequisite:** MUS 112.  
A continuation of materials and studies begun in MUS 112. Introduction to first inversion, second inversion, inner and outer phrase structure, seventh chords, suspension and pedal point, and transposition at the keyboard. Sight-singing and dictation in major and minor keys with compound meters. Foundation in harmonic dictation and cadential structures.
- MUS 201 **Survey of Music History and Literature I** 2 (2-1) F  
**Prerequisite:** MUS 113.  
An introduction to the study of music literature designed to provide the necessary background to the professional study of music. General survey of music history and literature from the beginnings through the Renaissance with emphasis on style, form and analysis.
- MUS 202 **Survey of Music History and Literature II** 2 (2-1) W  
**Prerequisite:** MUS 201.  
A survey of music history and literature of the Classical and Romantic periods with emphasis on style, form, and analysis.
- MUS 203 **Survey of Music History and Literature III** 2 (2-1) S  
**Prerequisite:** MUS 202.  
A survey of music history and literature of the Impressionist and Contemporary periods with emphasis on style, form, and analysis.
- MUS 206 **Music Performance** 2 (1-10) FWS SS  
**Prerequisite:** Completion of six quarter hours of MUS 106 in a single performing medium.

Individual instruction in the sections listed. A continuation of studies begun in MUS 106. Advanced standing in individual music performance for music majors. Student must perform exam for faculty committee each quarter to receive credit. SECTIONS: A—Voice; B—Piano; C—Organ; D—Brass; E—Woodwinds; F—Strings; G—Percussion.

- MUS 208 **Sandhills Singers** 1 (0-2) FWS  
**Prerequisite:** Permission of the instructor.  
 A maximum of twenty-five selected voices. A vocal ensemble that performs at college and community functions. Repertoire includes a wide range of choral literature.
- MUS 211 **Music Theory IV** 5 (5-1) F  
**Prerequisite:** MUS 113.  
 A study of the late Baroque chorale style, as culminated by J. S. Bach at the middle of the 18th century. Analysis of chorale harmonizations, embellishments, altered chords, cadential structures, and modulations. Sight-singing in four clefs involving modulation to closely related keys. Melodic dictation involving simple and compound meters. Harmonic dictation in four-part block chord style. Keyboard exercises in the chorale style with figured bass and simple transposition.
- MUS 212 **Music Theory V** 5 (5-1) W  
**Prerequisite:** MUS 211.  
 Continuation of the study of the late Baroque choral style, but with emphasis on freer compositional techniques for the student. Analysis of chorale harmonizations, non-harmonic tones, altered chords, cadential structures, and modulations. Sight-singing in four clefs with modulations to closely related and foreign related keys. Melodic dictation in simple and compound meters with emphasis on sub-divided rhythms, also, introduction to two-part dictation. Harmonic dictation in four-part block-chord style, involving primary and secondary chords in major and minor keys with simple modulations. Keyboard exercises in the chorale style with either melody or bass line given in addition to figured-bass analysis, also utilizing modulations and non-harmonic tones.
- MUS 213 **Music Theory VI** 5 (5-1) S  
**Prerequisite:** MUS 212.  
 An introduction to 18th century counterpoint. The student studies, analyzes, and composes two-part and three-part inventions, fugues, chorale preludes and others employing contrapuntal techniques, such as, strict imitation, free imitation, mirror, augmentation, diminution, stretto and pedal point. Also, the student studies, analyzes, and composes in the "common practice" of 18th century classicism employing forms, such as two and three part songs, rondo, and sonata. Sight-singing exercises involve modulation and compound meters. Advanced

harmonic dictation, utilizing modulation to closely-related and foreign-related keys, non-harmonic tones, and altered chords. The student is expected to realize a given figured bass at the keyboard.

### NURSING

- NUR 110 **An Introduction to Nursing** 2 (2-0) F SS  
**Prerequisite:** None.  
Study of the history, legal aspects and trends that have caused current nursing education and practice to evolve as we know it today. Basic communication and interpersonal relationships are stressed so that meaningful and therapeutic behavior skills can be developed.
- NUR 111 **Introduction to Pharmacology** 2 (2-0) F SS  
**Prerequisite:** None.  
Study of drugs, drug legislation, preparation, action, reaction and possible toxic effects. Mathematical principles of dosage for administration are stressed.
- NUR 112 **Basic Principles of Patient Care** 2 (0-6) F SS  
**Prerequisite:** None.  
An introductory course designed to help students develop nursing skills in terms of principles involved and nursing responsibilities inherent in them.  
Skill laboratory periods are also provided for the students' independent use according to their needs.
- NUR 113 **Nutrition** 2 (2-0) W  
**Prerequisite:** None.  
Study of relationships of nutrients to health. Principles of balanced diets, with the role of nutrients and their actions in the human body to maintain health is stressed.
- NUR 114 **Nursing Intervention in the Maternity Cycle** 7 (5-6) WS  
**Prerequisites:** NUR 110, 111, 112.  
Designed to explore the nurse's role with families during the normal maternity cycle. Nursing interventions are focused on meeting the needs of mothers and their newborn infants in order that the childbearing experience may be a safe and satisfying one for the mother, baby and family.
- NUR 115 **Psychiatric Nursing** 7 (5-6) WS  
**Prerequisites:** NUR 110, 111, 112, PSY 201.  
**Corequisite:** PSY 202 or Permission of Instructor.  
The study of nursing intervention in the care of patients with problems associated with deviant behavior. Included will be the fundamentals of nursing, basic concepts as well as common problems of psychiatric patients.

- NUR 116 **Nursing of Children** 7 (5-6) F SS  
**Prerequisites:** NUR 110, 111, 112, PSY 202.  
 Study of common problems encountered in caring for children from birth through adolescence. The student is guided in applying the nursing process to the care of children and families in health and sickness.
- NUR 117 **Basic Nursing Intervention to Adults** 9 (6-9) F SS  
**Prerequisites:** NUR 110, 111, 112.  
 The study of nursing involved in the care of people who have major common health deviations. Clinical pharmacology, diet therapy and psychological aspects of care are included in each area, with emphasis on nursing principles and roles.
- NUR 118 **Advanced Nursing Intervention to Adults** 10 (6-12) WS  
**Prerequisite:** NUR 117.  
 A study of nursing intervention in critical care situations. Comprehensive care including problem solving and developing skills in making sound nursing judgments is stressed.
- NUR 119 **Nursing Intervention in Maternal-Child Critical Situations** 10 (6-12) WS  
**Prerequisites:** NUR 114, 116.  
 Study of the nurse's role in caring for mothers and children with complex health problems.
- NUR 120 **Team Nursing** 3 (1-6) WS  
**Prerequisites:** NUR 115, 118, 119.  
 The study of the principles that provide for assuming membership and leadership roles in the nursing care team. Continuation of comprehensive care to all patients is emphasized.
- NUR 121 **Emergency Nursing Care** 3 (1-6) WS  
**Prerequisites:** NUR 115, 118, 119.  
 A study of the application of nursing principles in emergency and critical care situations. Emphasis is placed on nursing judgment, organization and follow-through in disaster situations.
- NUR 1001 **Practical Nursing I** 24 (21-9) S  
**Prerequisite:** Admission to Practical Nurse Education Program.  
 A beginning course designed to introduce the concepts of health, history of nursing, knowledge of basic sciences necessary to the beginning student which will serve as a guide in the development of the understandings and skills required to administer safe and high quality bedside nursing care.
- NUR 1002 **Practical Nursing II** 18 (12-18) SS  
**Prerequisite:** NUR 1001.  
 This course is designed to guide the student in approaches to maternal, newborn, and pediatric patients and, at the end of the quarter, to introduce medical-surgical aspects of nursing. Pertinent aspects of nutrition and pharmacology will be pre-

sented throughout the entire quarter. An adequate number of campus laboratory experiences are planned to prepare the student to function well at the bedside under instructor supervision.

**NUR 1003 Practical Nursing III 19 (12-18) F**

**Prerequisite:** NUR 1002.

A course which allows for further study and administration of nursing care to maternal and pediatric patients. Emphasis will be on medical-surgical conditions and the nursing care of adults. Communications, nutrition and pharmacology will be integrated in each unit of study. Clinical experiences will be provided to guide and support the student with correlating theoretical principles to effective bedside nursing care.

**NUR 1004 Practical Nursing IV 15 (8-22) W**

**Prerequisite:** NUR 1003.

This course will enable the advanced practical nursing students to continue their study of maternal and child care, and further study of more serious and complex medical-surgical conditions of adults. Nutrition adjustments and aspects of pharmacology will be included throughout the quarter. Provision is made to guide the student in making the transition to the role of the graduate practical nurse.

### PHILOSOPHY

**PHI 101 Introduction to Philosophy 5 (5-0) FS SS**

**Prerequisite:** None.

A survey of the major issues of philosophy. An examination of typical problems, such as moral freedom, the mind-body relationship, and the meaning of truth. A description of the schools of naturalism, idealism, realism and pragmatism.

**PHI 105 Beginnings of Modern Philosophy 5 (5-0) W SS**

**Prerequisite:** None.

A critical study of selected works of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant. Major emphasis on the philosophical problems brought about by the emergence of the modern world.

**PHI 110 Ethics 5 (5-0) FW**

**Prerequisite:** None.

An investigation into the ethical theory which attempts to determine valid principles of right and wrong as related to significant areas of human experience.

**PHI 201 Introduction to Logic 5 (5-0) FS**

**Prerequisite:** None.

A survey of the general principles of deductive and inductive logic and the characteristics of empirical knowledge. Emphasis on the establishment of reflective habits.

## PHYSICAL EDUCATION

The major emphasis in physical education is that of life-time sports. The student is encouraged to choose either individual or team sports. All activities attempt to familiarize the student with basic skills of that particular activity along with some rules, strategy, history and terminology.

- |     |     |  |                |
|-----|-----|--|----------------|
| PED | 100 | <b>Conditioning</b>  | 1 (0-2) W      |
|     |     | This course is designed to better physically condition the student. Basic calisthenics, low organized games and activities are used. Various methods of exercise are used, e.g., weight training, isometrics; use of circuit, interval training is also used.  |                |
| PED | 101 | <b>Gymnastics</b>  | 1 (0-2) FWS SS |
|     |     | Only basic gymnastics is touched upon using side horse (short), parallel bars and trampoline and two take-off boards: reuther and spring boards. Extra work can be done on the long box.   |                |
| PED | 102 | <b>Flag Football</b>   | 1 (0-2) F      |
|     |     | Basic skills are taught. Proper methods of throwing, catching, punting, pass patterns, rules and strategy are covered.   |                |
| PED | 103 | <b>Tennis</b>  | 1 (0-2) FS SS  |
|     |     | Designed for beginners. Students are taught eastern forehand and backhand (grips for ground strokes), continental grip for net play. Proper methods and procedures for servicing, return of serve, and overhead strokes, along with proper positioning in singles and doubles are covered. Students are taught the traditional scoring and use of the nine-point tie-breaker. Students must furnish rackets and balls. |                |
| PED | 104 | <b>Soccer</b>  | 1 (0-2) F      |
|     |     | Basic skills of foot trapping, body trapping, heading, in-step and out-step kicking are covered. Students familiarize themselves with rules and basic strategies.  |                |
| PED | 106 | <b>Track and Field</b>   | 1 (0-2) S      |
|     |     | This is not a conditioning course. The basic fundamentals of running, jumping, throwing, proper starting techniques and timing are taught. The students help set up and administer the local high school track meets.  |                |
| PED | 107 | <b>Volleyball</b>  | 1 (0-2) FWS SS |
|     |     | An attempt to teach power volleyball. The basic rules, plays and proper techniques of passing, setting, spiking and bumping (digging) are taught along with various serving techniques, scoring, positioning, and defensive plays.   |                |
| PED | 108 | <b>Archery</b>   | 1 (0-2) FS SS  |
|     |     | History, terminology and scoring along with proper techniques of bracing, drawing, and releasing of the equipment are taught. Equipment is furnished by the college.   |                |

- PED 109 **Weight Training** 1 (0-2) FWS  
Various methods of training with weights are explored. Iso-metrics along with the normal isotonics, the circuit program and some cross-country running are used to totally help condition the body. This is not a lifting class, but emphasis is placed on the proper procedure for picking up and training with weights.
- PED 110 **Horseback Riding** 1 (0-2) FS  
This course is taught by the riding professional at the Pinehurst Riding Stables. Basic horsemanship is taught. The course carries an additional fee.
- PED 111 **Golf** 1 (0-2) FS SS  
This course is taught by the golf professional at Knollwood Fairways in Southern Pines. Basic grips, strokes, rules and etiquette are covered. The course is adaptable to all levels of skills. The course carries an additional fee. Clubs are provided if needed.
- PED 112 **Speedball** 1 (0-2) F  
Primarily designed for girls. Speedball is a combination of soccer, basketball and football. Basic rules and strategies and skills of dribbling (with the feet), passing (both feet and hands) and kicking are covered.
- PED 113 **Softball** 1 (0-2) S SS  
Basic fundamentals of throwing, catching, hitting, cut-off plays, and rules are taught.
- PED 114 **Tumbling** 1 (0-2) W  
The fundamentals of rolls, cartwheels and pyramids are taught using the springboard and mats. Major emphasis of the course is to learn how to fall without injury. Group stunts are also covered.
- PED 115 **Baseball** 1 (0-2) S  
Not designed for the varsity ball team. Basic fundamentals of throwing, catching, hitting, cut-off plays, and rules are taught. Students are expected to assist in operation of home games. Course is taught by the college baseball coach.
- PED 117 **Basketball** 1 (0-2) W  
Two classes are offered in the winter, one for women and a separate class for men. Both are taught by the college basketball coaches. Basic fundamentals are covered, such as dribbling, shooting, screening and other offensive and defensive techniques. Current rules and team drills are introduced to help the student improve and enjoy the game.
- PED 118 **Swimming** 1 (0-2) SS  
Basic strokes are developed, along with the fundamentals of beginning diving. Since the college does not have a pool, this

course is only offered if a suitable facility is found each summer. Presently not for Red Cross credit.

- PED 119 **Beginning Fencing** 1 (0-2) FWS SS  
The foil weapon is used in this basic course with emphasis on grip, stance and establishment of good techniques for attacks and parries. The college furnishes all equipment.
- PED 120 **Angling** 1 (0-2) FS SS  
Emphasis is placed on bass fishing. Fishing is done at the college lakes. Both classroom and practical work is included. Guest speakers are brought in to discuss their techniques to further expose the novice and share ideas with the more advanced. The college has limited equipment.
- PED 121 **Beginning Snow Skiing** 1 (0-2) W  
This course is taught by the ski professional at Ski-High resort near Pinehurst. The skiing substance is silicone. The Swede technique of schooling is used, starting the beginning students on short skis and graduating to longer lengths. The course carries an additional fee.
- PED 150 **Personal and Community Hygiene** 3 (3-0) FWS  
**Prerequisite:** None.  
Designed to present basic and community health knowledge and to develop proper health habits and attitudes in the individual and the community. A general survey of personal and community health habits and conditions, including adjustments of the college freshman.
- PED 220 **Principles of Health and Physical Education** 5 (5-0) W  
**Prerequisite:** None.  
Course is designed for those students who might be interested in this discipline for a career. Includes the history of health and physical education, basic philosophical, psychological, physiological, and sociological background for the teaching of health and physical education. Current problems and issues are discussed.

### PHYSICS

- PHY 201 **General Physics I** 4 (2-2-2)\* FW SS  
**Prerequisites:** MAT 110 or MAT 131 or equivalent.  
The first of three quarters of a beginning course in general physics designed to provide an understanding of the fundamentals on which technology is based. Topics to be covered are mechanics, properties of matter, and heat.
- PHY 202 **General Physics II** 4 (2-2-2)\* WS SS  
**Prerequisite:** PHY 201.  
A continuation of PHY 201; topics covered are mechanical wave motion, electricity and magnetism, and electronics.

- PHY 203 **General Physics III** 4 (2-2-2)\* F S SS  
**Prerequisite:** PHY 202.  
 A continuation of PHY 202; topics covered are atomic and nuclear physics and light. (This course will be offered in the Fall Quarter beginning in 1975.)
- PHY 204 **Engineering Physics** 3 (3-0) S SS  
**Prerequisites:** MAT 202, PHY 203.  
**Corequisite:** MAT 203.  
 A study of selected topics from classical and modern physics in which calculus is employed. This course supplements the one year General Physics course to meet the physics requirements for pre-engineering students.
- PHY 1101 **Applied Science I** 4 (3-2) F  
**Prerequisite:** None.  
 An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

### PHOTOGRAPHY

- PHO 110 **Introduction to Photography** 4 (2-4) FWS  
**Prerequisite:** None.  
 An introduction to art and techniques of photography including composition, developing the negative, and printing photographs. Students must provide their own camera.

### POLITICAL SCIENCE

- POL 201 **The American Political System** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A study of the major political institutions of the American political system. Relationship between the people and their political institutions with emphasis on political culture, socialization, the electoral process, mass communication, political parties, interest groups and public opinion.
- POL 202 **State and Local Political Systems in the American Political System** 5 (5-0) W  
**Prerequisite:** POL 201 or permission of instructor.  
 A comparative study of the relationships of state and local political systems within the federal system. A study of the major institutions and the processes of decision making.
- POL 203 **Afro-American Political Thought** 5 (5-0)\*  
**Prerequisite:** None.  
 A study of the Afro-American political theories and ideas ranging from those of Martin R. Delany to Herbert Marcuse and

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\* 2 hours lecture, 2 hours lab, 2 hours recitation.

from Stokely Carmichael to Martin Luther King, Jr. Emphasis will be placed on the understanding, evaluation, and criticism of these concepts, to provide realistic and meaningful alternatives to our present government.

- POL 204 **Introduction to Comparative Political Systems** 5 (5-0) F  
**Prerequisite:** POL 201 or permission of instructor.  
 Comparative examination of political institutions and behavior in selected Western nations.
- POL 205 **Special Topics** 5 (5-0) FWS  
**Prerequisites:** POL 201 and permission of instructor.  
 Research and reading course on specified topics by independent study.
- POL 206 **Process and Problems in the U.S.A.** 5 (5-0) S  
**Prerequisite:** POL 201 or permission of instructor.  
 A study of contemporary problems and issues in the American political system.

### PSYCHOLOGY

- PSY 201 **Principles of Psychology** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 A basic course presenting a study of behavior in terms of perception, motivation, learning, heredity, environment, emotion, personality, adjustment, therapy, and social behavior.
- PSY 202 **Developmental Psychology** 5 (5-0) WS SS  
**Prerequisite:** PSY 201.  
 A study of the development and behavior of the individual from conception through childhood, adolescence, and adulthood, to old age. Emphasis on the inter-relation between the biological and social influence.
- PSY 203 **Behavior Disorders I** 3 (2-3) S  
**Prerequisite:** PSY 201.  
 Study of abnormal mental phenomena in relation to normal life including such topics as sensation, perception, thought, sleep, dreams, hypnosis, disassociation, role of defense mechanisms, psychoneurosis, and personality disorders.
- PSY 204 **Behavior Disorders II** 4 (4-0) F  
**Prerequisite:** PSY 203 or permission of instructor.  
 Study of selected patterns of deviant behavior with emphasis on the understanding, treatment, and prevention of these personality disorders. Attempts are made to relate personality disorders to role definition and interaction of team members in providing comprehensive mental health services.

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- PSY 206 **Introduction to Personality** 5 (4-3) F  
**Prerequisite:** PSY 201.  
Study of the hereditary and environmental sources of individual differences in personality.
- PSY 207 **Introduction to Psychological Testing** 5 (4-3) F  
**Prerequisite:** PSY 201 or permission of instructor.  
Designed to provide the student with knowledge of the nature and rationale of major psychological tests. Elementary statistical concepts are included to acquaint the student with the language of test design and use. Each student will be required to administer, score, and interpret the Wechsler Intelligence Scale for Children, Wechsler Adult Intelligence Scale, and the Stanford Binet Intelligence Scale.
- PSY 209 **Introduction to the Study of Exceptional Children** 4 (3-3) F  
**Prerequisite:** Permission of instructor.  
Survey of the broad range of exceptionality with special emphasis on the mentally retarded and the emotionally disturbed. Social, educational, and psychological needs of the exceptional child are studied.
- PSY 210 **Introduction to Counseling** 3 (3-0) S  
**Prerequisite:** Permission of instructor.  
To acquaint the student with the philosophy, theory, and techniques the counselor uses to implement his concept of "helping." Emphasis throughout is upon knowing oneself and developing a personal and unique style. An attempt will be made to provide opportunities to observe and participate in the helping relationship in various settings.
- PSY 215 **Psychology of Black Americans** 5 (5-0)\*  
**Prerequisite:** None.  
The study of personality variables such as motivation, anxiety, alienation, the need for security as they relate to the fact and experience of being black in America.
- PSY 220 **Applied Psychology** 5 (5-0) FWS  
**Prerequisite:** None.  
A practical course designed to demonstrate the application of principles of psychology to specific occupational and personal problems. Special attention will be given to problems of supervision, relationships with co-workers, work attitudes, and customer relations. Attention will also be given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.

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\* Course offered based upon demand.

PSY 1101 **Human Relations** 3 (3-0) S SS  
**Prerequisite:** None.

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

### READING

RDG 100 **Reading** 3 (3-0) FWS SS  
**Prerequisite:** None.

This course will be based on the philosophy that the development of reading is a continuous process and that the so-called study skills must be taught and applied if one is to succeed in subject matter reading. Major stress will be given to techniques for developing vocabulary and the process of comprehension and fluency (speed) in comprehension.

RDG 201 **Reading in the Elementary School** 3 (0-3)\*  
**Prerequisite:** None.

This course helps the aide to understand the nature of the reading process. Knowledge and application of basic reading skills will be stressed.

RDG 202 **Methods and Materials in Reading** 3 (0-3)\*  
**Prerequisite:** RDG 201 recommended.

Aides will study current programs, practices, materials, and philosophy of teaching reading. Aides will design, make, and utilize instructional materials to be used in their current classrooms.

### RELIGION

REL 101 **Religions of the World** 5 (5-0) FWS  
**Prerequisite:** None.

The great religions of mankind as related to the history of China, India, and the Near East. The study of this background and the reading of the great classics of these religions.

REL 106 **Religious Thought in the Twentieth Century** 5 (5-0)\*  
**Prerequisite:** None.

A study of recent trends in religious thought as exhibited by thinkers like Niebuhr, Maritain, Buber, Tillich, and Temple.

REL 151 **Introduction to Old Testament Literature** 5 (5-0) W  
**Prerequisite:** None.

The historical background of books of the Bible, to enable students to read the Old Testament with fuller appreciation of its messages about man and God.

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\* Course offered upon demand.

REL 161 **Introduction to New Testament Literature** 5 (5-0) S  
**Prerequisite:** None.  
 The life, teachings, and significance of Jesus Christ and Saint Paul; emphasizes especially the study and comparison of the first three gospels.

REL 171 **Philosophy of Religion** 5 (5-0) F S  
**Prerequisite:** None.  
 An inquiry into the philosophical foundations of religious experience. Problems of belief and knowledge, faith and reason, the possibility of truth, the nature of evidence, the existence and nature of God, the character and meaning of religious commitment.

### SCIENCE SURVEY

SCI 101 **Physical Science Survey I\*\*** 4 (3-2) F  
**Prerequisite:** None.  
 A study of the principles of chemistry and geology. Chemistry topics included are: theory and structure of the atom, chemical bonds and reactions, oxidation-reductions, organic compound. Geological principles studied are: earth materials and their history, the atmosphere erosion and sedimentation, and vulcanism and diastrophism. An integrated lecture and laboratory presentation.

SCI 102 **Physical Science Survey II\*\*** 4 (3-2) W  
**Prerequisite:** None.  
 A study of the principles of physics and astronomy. All the major divisions of physics will be represented, namely, mechanics, properties of matter, heat, sound, electricity and magnetism, atomic and nuclear physics, and light. The more important principles and facts about the universe and our solar system will be studied, along with their applications to space science.

SCI 103 **Biological Survey** 4 (3-2) S\*  
**Prerequisite:** None.  
 A course designed to emphasize the fundamental principles of biology through the study of the concepts of protoplasmic and cellular organization, growth and differentiation, genetic and ecological control, and current and past evolution. An integrated lecture and laboratory presentation.

### SOCIOLOGY

SOC 201 **Principles of Sociology** 5 (5-0) FWS SS  
**Prerequisite:** None.  
 An analysis of the structure and functions of modern society.

\* Course offered upon demand.

\*\* Course designed to meet the science requirements of those majoring in elementary education.

- Illustrates societal conditions which influence individual and mass behavior.
- SOC 202 **Race Relations in the United States** 5 (5-0)\*  
**Prerequisite:** None.  
 The study of racial and cultural minorities in the United States in the context of past and current developments. An examination of value systems and social institutions as they bear on the formation of race relations.
- SOC 203 **Social Problems** 5 (4-3) S  
**Prerequisite:** SOC 201 or permission of instructor.  
 A sociological analysis of aspects of American culture and institutions which are the sources of, or contribute to, contemporary social problems; along with the consequences, such as poor race relations, minority group problems, crime and delinquency, mental illness, and population changes.
- SOC 204 **Community Organization, Conflict and Change** 5 (4-3) SS  
**Prerequisite:** SOC 201 or permission of instructor.  
 A study of the American rural tradition contrasted with urbanism as a way of life, with emphasis on the forces that create social problems in a changing society; such as group relationships, mass living, culture conflicts, social classes, population changes and a brief analysis of the organization of various types of communities, intergroup relations, and the community power structure.
- SOC 212 **Sociology of the Family** 4 (4-0) W  
**Prerequisite:** SOC 201.  
 A study of the contemporary American family in social context, reviewing such areas as courtship and preparation for marriage, roles and status of members in their relationship, problems of adjustment within the family, the family as a social unit and institution, economic aspects of the family with emphasis on socio-economic influences on family status, influence of personality development and the effects of contemporary social change on the American family patterns.
- SOC 213 **Social Agency Interviewing** 4 (3-3) W  
**Prerequisite:** Permission of instructor.  
 Study of the purposes, structure, focus, and techniques employed in effective interviewing. Laboratory experiences provide opportunities for observation and practice in taking personal histories and other interviewing skills.

### SPANISH

- SPA 101 **Elementary Spanish I** 5 (5-2) FW SS  
**Prerequisite:** Satisfactory score on college placement tests.  
 An introduction to Spanish, with a modern audiolingual ap-

proach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work required as part of the course. For those with no previous Spanish or those who do not make a satisfactory score on Spanish placement tests.

SPA 102 **Elementary Spanish II** 5 (5-2) WS SS

**Prerequisite:** SPA 101.

A continuation of SPA 101.

SPA 151 **Intermediate Spanish I** 5 (5-2) FS

**Prerequisite:** Two units of high school Spanish and a satisfactory placement test score, or SPA 101 and SPA 102.

A review of the skills of hearing, speaking, reading and writing. Audiolingual work in class and in lab. Selected supplementary readings.

SPA 152 **Intermediate Spanish II** 5 (5-2) FW

**Prerequisite:** SPA 151.

A continuation of SPA 151.

SPA 201 **Survey of Spanish Civilization** 5 (5-1) S

**Prerequisite:** SPA 152.

A study of Spanish culture and civilization. Selected readings in literature of Spain and Spanish America from ancient to modern times. An emphasis on modern civilization.

SPA 202 **Conversational Spanish** 5 (5-1) W\*

**Prerequisite:** SPA 152 or equivalent.

A systematic study of Spanish with a stress on oral skills. Listening, speaking, reading, composition.

### SPEECH

SPH 101 **Principles of Speech** 5 (5-0) FWS SS

**Prerequisite:** None.

A functional approach to the problem of effective speaking. The organization, composition and delivery of speeches, with particular emphasis on application in actual speech situations.

### TEXTILES

The textile courses listed in the Textile Management Technology curriculum (T 101, TC 203, TX 330, TX 220, TX 250, TX 211, TC 301) are courses offered in the School of Textiles, N. C. State University and are described in the N. C. State University college catalogue. These courses are given for Textile Management Technology students on the Sandhills Community College campus.

The management courses required in the Textile Management Technology program are basic "supervisory development training"

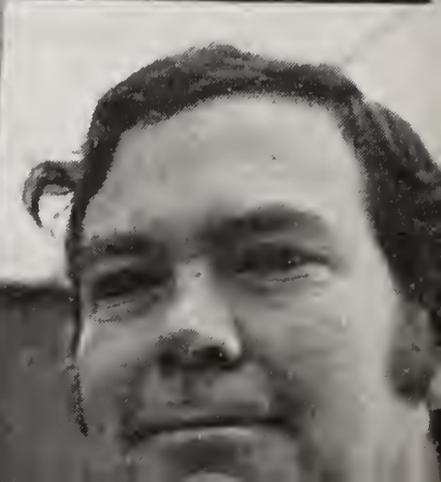
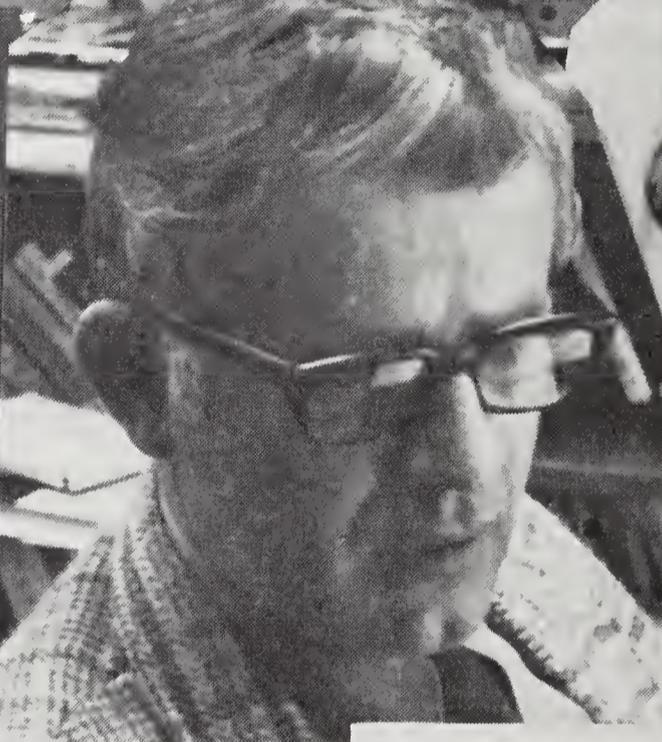
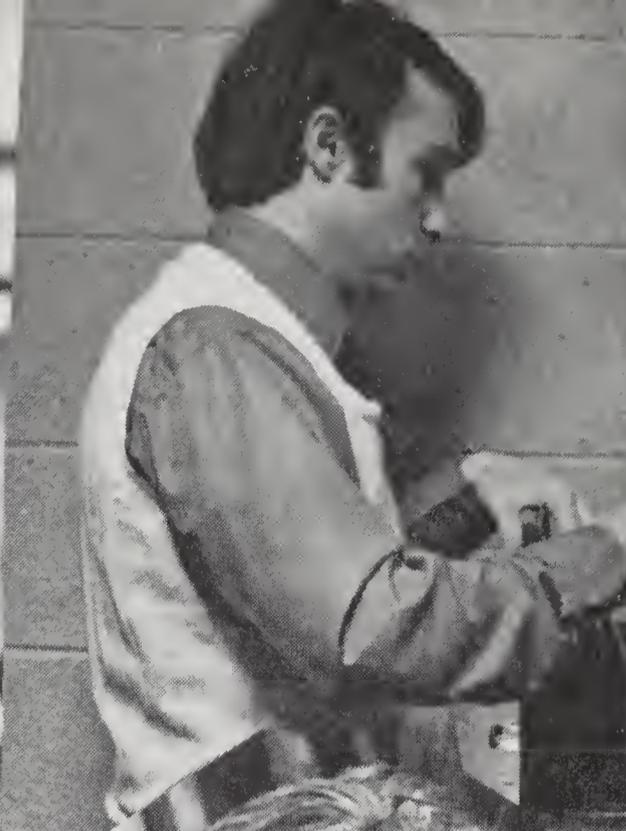
\* Course offered based upon demand.

courses which have been revised to meet the needs of students in the Textile Management Technology program.

### WELDING

- WLD 1101 **Basic Gas Welding** 2 (1-2) F S  
**Prerequisite:** None.  
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, silver-soldering, and flame-cutting methods applicable to mechanical repair work.
- WLD 1102 **Gas-Arc Welding** 1 (0-3) S  
**Prerequisite:** WLD 1101.  
This is a follow-up to WLD 1101. More emphasis is placed on torch manipulation for various welds. Flame cutting is also introduced. Further techniques in the art of brazing are brought out and initial AC-DC electric arc welding is taught.
- WLD 1105 **Auto Body Welding** 2 (1-3) W  
**Prerequisite:** WLD 1101.  
Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods and deck lids. Student runs beads, does butt and fillet welding. Performs tests to detect strength and weakness of welded joints. Safety procedures are emphasized throughout the course.





# COLLEGE PERSONNEL

1974-75

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Harlan McCaskill ..... *Dean of Continuing Education*

Charles C. Yarbrough ..... *Dean of Students*

Eugene A. Watts ..... *Business Manager*

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Dr. Avery J. Dennis ..... *Chairman, Department of Science*

I. John Krepick ..... *Chairman, Department of Business*

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Wayne Livengood	Chairman, Audiovisual Services
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Terrell R. West	Chairman, Department of Physical Education

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Eddie B. Coleman	Chairman, Adult Basic Education Programs
Hazel Fitch	Chairman, Learning Laboratory
D. L. Furches	Chairman, Adult General Education Programs
Jesse Mansfield	Chairman, Adult Occupational Education Programs

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Dr. Fleet D. Allen	Director of Research and Development
James C. Halstead	Assistant to the President
Terrell R. West	Director of Athletics
Mrs. Leone H. Koster	Director of News Bureau

### FACULTY

Acton, Jack R.	Art
B.S., Bowling Green State University, Ohio; M.S., Indiana University	
Adams, Wayne T., Jr.	Sociology
B.S., M.S., N. C. State University, Raleigh	
Allen, Fleet D.	Director of Research and Development
B.S., M.S., Ed.D., N. C. State University, Raleigh	
Allen, Mrs. Louise S.	Economics
B.S., High Point College; M.Ed., U.N.C. at Greensboro	
Anderson, Mrs. Rose	Chairman, Library Services
A.B., Columbia University Teachers College; M.L.S., Graduate School of Library Service, Rutgers University	
Atkins, Mrs. Billie M.	Nursing
B.S.N., East Carolina University	
Averette, Mrs. Edith B.	Nursing
B.S.N., East Carolina University	
Averitt, Thomas H.	Business
B.S., U.N.C. at Chapel Hill; C.P.A.	
Beard, H. G.	Dean of Instruction
B.S., M.Ed., N. C. State University, Raleigh; Ed.D., Cornell University	

- Bennett, Ridsen T. . . . . *Civil Engineering Technology*  
B.S., N. C. State University and Missouri School of Mines and Metallurgy
- Blackwell, Mrs. Alleen R. . . . . *Area Coordinator, Hospitality Education*
- Bondurant, Ruth V. . . . . *Physical Education*  
B.S., M.A., Appalachian State University
- Brogden, Mrs. Hope M. . . . . *Political Science*  
A.B., Salem College
- Bryant, Arthur E. . . . . *Physics*  
B.S., M.B.A.E., N. C. State University, Raleigh
- Carpenter, John H. . . . . *Electronics*  
A.A., Sandhills Community College; B.S., N. C. State University, Raleigh
- Carr, Dawson V. . . . . *Chairman, Department of Mathematics*  
B.S., M.A.T., U.N.C. at Chapel Hill
- Coffey, Verlin O. . . . . *Foreign Languages*  
B.A., M. Ed., University of South Carolina; Univ. Javeriana, Bogota;  
Faculdade de Bebedouro, Brazil
- Cole, Mrs. Barbara H. . . . . *English*  
A.B., M.A., U.N.C. at Greensboro
- Coleman, Eddie B. . . . . *Chairman, Adult Basic Education Programs*  
B.S., M.S., N. C. A & T State University
- Connolly, Vincent H. . . . . *Business*  
B.A., Rutgers University; M.Ed., N. C. State University, Raleigh
- Covington, Miss Margaret L. . . . . *Coordinator, Associate  
Degree Nursing*  
B.S.N., University of Colorado
- Crockett, Mrs. Joan H. . . . . *Educational Coordinator of  
Programs for Older Adults*  
A.A., Virginia Intermont College; A.B., University of North Carolina at  
Chapel Hill
- Crump, Mrs. Shelvey S. . . . . *Business*  
A.A., College of The Albemarle; B.S., Old Dominion University; M.A.,  
Appalachian State University
- Dagostino, Frank R. . . . . *Construction Trades and  
Architectural Technology*  
A.A.S., Hudson Valley Community College, New York; B.A., University  
of Florida
- Dare, LeRoy J. . . . . *History*  
B.A., Wake Forest University; M.A., Ph.D., U.N.C. at Chapel Hill
- Davis, Mrs. Dawn . . . . . *Business*  
B.S., Appalachian State University
- Davis, Judith A. . . . . *Coordinator, Medical Laboratory Technology*  
B.S., High Point College; M.T., Bowman Gray School of Medical Tech-  
nology (ASCP)
- Davis, Lester H. . . . . *Biology*  
B.S., M.A., Appalachian State University
- Dennis, Avery J. . . . . *Chairman, Department of Science*  
B.S., M.S., N. C. State University; Ph.D., U.N.C. at Chapel Hill

- Dowd, Joseph B. ..... *Automotive Mechanics*  
U.S.A.F. Technical School
- Duncan, Haskell A. ..... *Religion*  
A.B., Catawba College; M.Div., Southeastern Baptist Theological Seminary
- Ewing, Mrs. Katherine R. ..... *Music*  
B.M., Westminster Choir College
- Fitch, Mrs. Hazel T. ..... *Chairman, Learning Laboratory*  
B.A., Furman University, Greenville, S. C.
- Flaherty, John A. ..... *Automotive Mechanics*  
B.S., Northern Michigan University
- Fletcher, James R. ..... *Philosophy and Religion*  
A.B., Catawba College; B.D., Th.M., Southeastern Baptist Theological Seminary
- Fowler, Mrs. Linda B. ..... *Nursing*  
B.S.N., East Carolina University
- Franklin, Russell M. ..... *Coordinator, Learning Laboratory*  
B.A., Cumberland College, Williamsburg, Kentucky
- Freeman, Basil H., Jr. ..... *Music*  
B.M.E., St. Andrews Presbyterian College
- Furches, D. L. .... *Chairman, Adult General Education Programs*  
A.B., U.N.C. at Chapel Hill; M.Ed., The Johns Hopkins University
- Garner, Carlton R. ..... *Physical Education*  
B.S., M.A., Appalachian State University
- Garner, Don R. ..... *Reading*  
B.S., M.A., Appalachian State University
- Garrett, Frederick W. .... *Landscape Gardening*  
B.S., University of Florida; M.S., Va. Polytech. Institute, Blacksburg, Va.
- Griffin, L. Elizabeth ..... *History*  
B.S., Mary Washington College, Virginia; M.A., U.N.C. at Chapel Hill
- Grimes, Mrs. Frances L. .... *Music*  
B.M., Flora Macdonald College
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