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## General Catalog 1997-98 <br> Mitchell Community College

This Catalog is published by Mitchell Community College as an announcement of programs and courses. Its purpose is to provide information and does not constitute a contract. The College has the right to make changes in policies and procedures and to add or withdraw courses as needed. The North Carolina Community College System is in the process of reevaluating and updating all courses and programs and converting from the eleven-week quarter academic term to the sixteen-week semester academic term. As part of that System, MCC is engaged in that transitional process. The information contained in the Catalog is accurate as of March 1, 1997. Interested individuals should inquire about updates/revisions as the admissions process is initiated.

## If you have any questions after reviewing this publication, please look below to find the proper office to contact:

Admissions \& Records ..... 878-3243
Admissions/Counselors ..... 878-3267/3288
Business Office ..... 878-3210
Career Planning and Placement ..... 878-3242
Continuing Education ..... 878-3220
Dean of Student Services ..... 878-3281
Financial Aid ..... 878-3255
General Information/Switchboard ..... 878-3200
Learning Resource Center ..... 878-3271
Placement Testing ..... 878-3242
President's Office ..... 878-3205
Vice President for Instruction ..... 878-3264
Basic Skills ..... 878-3222

Address correspondence to any office in care of: Mitchell Community College

West Broad Street Statesville, NC 28677

## ■Correspondence and Phone Directory

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LIBRARY SERVICES Rex Klett878-3271
STUDENT SERVICES Billie A. Meeks


## Greetings:

Welcome to Mitchell Community College! With the publication of this new catalog, Mitchell returns to the semester system. The most noticeable changes will be an increase in the length of the terms and an earlier starting date for the fall term with its conclusion before the Christmas Holidays. Less apparent will be the complete "reengineering" of all the courses in the college curriculum. Not only are there new course names and numbers, but the titles of programs have been updated as well. In addition, faculty have redesigned all courses and developed new course syllabi. All of these efforts are aimed at improving the content and learning outcomes of our courses and facilitating transfer of work completed at Mitchell to other institutions.

We are proud that at Mitchell the student is the focal point of all our efforts. We are eager to be your partner in the successful completion of your educational and training goals. Your responsibilities in that regard are quite significant if the partnership is to work as it is intended. We believe your studies at Mitchell will prepare you for the significant challenges in the years to come. We look forward to celebrating your success with you.

Sincerely yours,

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# Mitchell Community College Academic Calendar 1997-98 

Summer Term 1997

| June | 4 | Wednesday | Registration |
| :--- | :--- | :--- | :--- |
|  | 5 | Thursday | Classes Begin \& Drop/Add |
| July | 3 | Thursday | Midterm |
|  | 4 | Friday | Holiday (No Classes) |
|  | 7 | Monday | Classes Resume |
| July | 14 | Monday | Last day to withdraw from a class <br> or school without a grade of "F" |
| July | $21-25$ | Monday-Friday |  <br>  <br> August |
|  | $4 \& 5$ | Monday \& Tuesday | Early Registration |
| August | 5 | Tuesday | Exams |
| End of Summer term |  |  |  |

## Fall Semester 1997

| August | 18 | Monday | Registration |
| :---: | :---: | :---: | :---: |
|  | 19\&20 | Tuesday\&Wednesday | Faculty Workdays |
|  | 21 | Thursday | Fall Semester Classes Begin \& Drop/Add |
| September | 1 | Monday | Labor Day (No Classes) |
| October | 16 | Thursday | Midterm |
|  | 20\&21 | Monday \& Tuesday | Fall Break |
| November | 11 | Tuesday | Last day to withdraw from a class or school without a grade of " $F$ " |
|  | 27\&28 | Thursday \& Friday | Thanksgiving Holidays (No Classes) |
| December | 1-5 | Monday - Friday | Spring Semester Advising \& Early Registration |
|  | 11-17 | Thurs-Wed. | Final Exams \& End of Fall Semester |
|  | 18 \&19 | Thursday \& Friday | Faculty Workdays |
|  | 22-31 |  | Winter Holiday |
| January | 1 \& 2 | Thursday \& Friday | New Year's Holiday |

## Spring Semester 1998

| January | 5 | Monday | Faculty Workday |
| :--- | :--- | :--- | :--- |
|  | 6 | Tuesday | Registration |
|  | 7 | Wednesday | Faculty Workday |
|  | 8 | Thursday | Spring Semester Classes Begin <br>  <br>  <br> March |
|  | 19 | Monday | \& Drop/Add |
|  | 9 | Monday-Friday | Martin Luther King Holiday (No Classes) |
|  | 9 | Monday | Spring Break (No Classes) |
|  | 12 | Thursday | Classes Resume |
|  |  | Midterm |  |


| April | 3 | Friday | Last Day to withdraw from a class or <br> school without a grade of "F" |
| :--- | :--- | :--- | :--- |
| April | $20-24$ | Monday-Friday | Summer Semester Advising <br> \& Early Registration |
| April | $30-$ |  | Final Exams \& End of Spring Semester |
| May 6 | Thurs.-Wed. | Graduation |  |

## Summer Semester 1998

| May | 18 | Monday | Registration |
| :--- | :--- | :--- | :--- |
|  | 19 | Tuesday | Faculty Workday |
| June | 20 | Wednesday | Summer Semester Classes Begin |
| July | 23 | Tuesday | Midterm |
|  | 2,3 | Thursday, Friday | Summer Break (No Classes) |
|  | 6 | Monday | Classes Resume |
|  | 9 | Thursday | Last day to withdraw from a class or <br> school without a grade of "F" |
|  | 23-28 | Thurs.-Tues. | Final Exams \& End of Summer Semester |

## General Information



## Institutional Description

Mitchell Community College, founded in 1852, is a comprehensive, open-admissions community college dedicated to meeting the post-secondary education and training needs of the citizens of Iredell County and surrounding areas. The college provides an array of high quality programs at low cost in an historically rich environment. Mitchell is a student-centered institution where all persons are encouraged to develop their abilities in a community that respects diversity and is supportive of individual achievement. Concerned with the social, civic, cultural, and economic development of the community as a whole, instructional programs are focused on meeting the educational and training needs of all persons over eighteen years of age and persons sixteen years of age and older with special needs. Mitchell Community College commits its resources to the following purposes: (1) to provide associate degree programs for the first two years of academic courses leading to baccalaureate and professional degrees; (2) to provide associate degree, diploma, and certificate programs to meet the pre-service and in-service manpower training needs for industry, business, government, and service occupations; (3) to serve the adult population with basic education and salable skills; (4) to enhance personal development through general and continuing education.

## Location

Mitchell Community College is located in Piedmont North Carolina, downtown Statesville, in the foothills of the Blue Ridge Mountains. Interstate Highways 40 and 77 intersect on the outskirts of the city. Statesville is situated approximately 50 miles north of Charlotte, and 50 miles southwest of Winston-Salem. The population of Statesville and Iredell County is approximately 92,000 .

## Mission

Mitchell Community College is committed to providing affordable, high quality educational programs and opportunities for lifelong learning which meet the dynamic and diverse needs of our community.

## Purpose

Mitchell Community College commits its resources to the following purposes:
to provide associate degree, diploma, and certificate programs to meet the pre-service and inservice manpower needs for industry, business, government, and service occupations; to provide associate degree programs for the first two years of academic courses leading to baccalaureate and professional degrees; to provide each student the opportunity to develop the skills and values necessary to succeed in college; to serve the adult population with basic education and salable skills; to enhance personal development through general and continuing education.

## Belief Statements

The faculty, staff and administration of Mitchell Community College are committed to the philosophy of the comprehensive community college. Therefore, we believe

That the student is the focal point of all efforts of the college; That we are a college community that respects diversity and is supportive of individual achievement; That Mitchell Community College has a responsibility to enhance the social, civic, cultural, and economic development of the community; That Mitchell Community College has a responsibility to enhance the
quality of life of the community; and That the door of opportunity for learning should be open to all who seek personal and professional development.

## Accreditation

Mitchell Community College is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097): telephone number 404-679-4501) to award the Associate of Arts, Associate of Science, Associate of Fine Arts and Associate of Applied Science degrees.

Membership<br>Mitchell Community College is a member of:<br>Carolinas Association of Collegiate Registrars and Admissions Officers<br>National Association of Veteran Program Administrators<br>National Association of Student Financial Aid Administrators<br>Southern Association of Colleges and Schools<br>The National Institute for Staff and Organizational Development<br>American Community College Business Officers<br>American Association of Community Colleges<br>National Council on Black American Affairs<br>American Association of Women in Community Colleges<br>North Carolina Association of Colleges and Universities<br>Professional Secretaries International<br>Charlotte Area Educational Consortium<br>Mooresville-South Iredell Chamber of Commerce<br>Greater Statesville Chamber of Commerce<br>North Carolina Citizens for Business and Industry<br>Association of Community College Trustees<br>North Carolina Association of Community College Trustees

## Veterans

Persons enrolled in an approved program at Mitchell Community College will be eligible to receive Veteran's educational benefits if they qualify.

## Academic Freedom

Mitchell Community College is committed to a collegiate environment in which academic freedom flourishes. Academic freedom extends, but is not limited to, the full freedoms within the law of inquiry, discourse, teaching, research, and publication. All College staff are granted these rights and privileges associated with academic freedom but the College requires corresponding adherence to responsibility. Such responsibility includes the employees' acknowledgment of accuracy and the employees' acknowledgment of their association with the College and their positions as men and women of a teaching-learning institution.

## Admissions, Expenses and Financial Aid



## - Admission

Mitchell Community College subscribes to the "Open Door" policy as set by the North Carolina Department of Community Colleges. It should be noted that a high school diploma or GED is required for entry into all post-secondary programs. The GED diploma serves as Mitchell's test of a student's ability to benefit from instruction.
Mitchell Community College is an equal educational opportunity institution; and in keeping with this policy, the college serves students without regard to race, color, sex, religion, creed, handicap, age or national origin.

## Admission and Ability to Benefit Requirements

1. High school graduate or GED equivalency diploma.
2. Minimum age of 18 without a high school diploma or its equivalent qualifies for a "Special Credit Student".
3. Minimum age of 16 with identified special needs and written permission from high school principal and/or superintendent of the school system the student would normally attend.

## Admission Process

Completion of the following steps is required for all curriculum programs:

1. Completed application;
2. High school and college (if transfer student) transcripts; and
3. Placement tests.

## Admission-Allied Health Programs

Associate Degree Nursing - A high school diploma or equivalent as established by the GED test and completion of one year of chemistry are required.
Students who have not completed chemistry while in high school must complete this course at the college prior to review of their application by the admissions committee. Satisfactory completion of the placement tests is required. Students with scores that fall below the required passing scores on placement tests will be required to take and successfully complete prescribed developmental courses and retest before their application will be reviewed by the admissions committee.
A minimum grade point average of 2.5 on previous college course work or high school average is required. Students must have current CPR certifcation and have completed a Nursing Assistant I course within two years prior to enrollment in the Nursing Program. Medical Assisting and Phlebotomy - A high school diploma or equivalent as established by the GED test is required. Students with scores that fall below that required to take and successfully complete prescribed developmental courses.

## Readmissions

Applicants for readmission are required of all students for whom one academic year has elapsed since their last enrollment. The student must submit an application through the Admissions Office and be advised by a curriculum advisor concerning changes in their curriculum since their last date of attendance; any new degree or diploma requirements will be clarified at that time.
Applicants for readmission to limited enrollment programs must follow regular admission procedures for those programs.

## Admission-Transfer

Transfer students may enter Mitchell Community College upon completing the process outlined above. Official transcripts of all previous college course work must be submitted. Credit will be granted whenever possible, as stated in the Transfer of Credits Policy.

## Admission-Visiting Students

A student who has been accepted by or is enrolled at another institution may enroll at Mitchell Community College as a visiting student. Such students must complete an application and should have the permission of an appropriate official at the home institution. This official should specify the courses to be taken at Mitchell. The student should enroll in only the specified courses and then only if the required prerequisite courses or their equivalents have been completed.

## Dual Enrollment Statement

Dual enrollment allows high school students to enroll at Mitchell Community College to enrich their education experience and gain college credit while remaining in high school. In order to meet the requirements of the program, a student must be 16 years of age or older, be attending high school half-time and must submit a dual enrollment form signed by the appropriate high school official. Dual enrollment students must meet standard pre-requisite requirements for courses and are not eligible for developmental course work. Tuition fees are not charged, but students must pay fees and buy required texts and materials.

## Admission-Continuing Education

Students who are high school graduates or 18 years old or 16 years old with special permission are eligible to enter a Continuing Education Program. Further information is available in the Continuing Education section of this publication.

## Special Credit Students

A special credit student is defined as one who is enrolled in curriculum credit courses but who is not working toward a degree, diploma or certificate. Special credit students will be allowed to register for courses provided that prerequisite requirements are met.
For admission, special credit students need only to complete the application which is available in the Admissions Office. Special students, however, will be asked to submit proof of high school graduation and meet placement criteria if they desire to be reclassified as regular students. Special students will pay the same tuition and fees as regular students.

## Placement Testing

Mitchell recognizes that due to our "open door" admission policy not all matriculating students are able to pursue college level courses upon enrolling. Because of this, all program students are required to take the Computerized Placement Test (CPT) to assess skill levels in reading, writing, arithmetic, algebra and keyboarding. Based on scores, students are required to complete developmental courses before enrollment in college level courses. In competitive admission programs, the admissions requirements are such that a certain reading and arithmetic competency must be demonstrated before enrollment. Examples of competitive admission programs are Associate Degree Nursing and Medical Assisting.

## Transfer of Credits

Educational work taken at a regionally accredited institution in which a grade of " $D$ " or better was earned may be accepted if transfer is appropriate to the student's program of study, provided the student has an overall " C " average. If the overall average is less than 2.0 , only grades of "C" or better will be accepted.
Work at institutions which are not regionally accredited is evaluated on the basis of the current issuie of Report of Credits Given by Educational Institutions published by the AACRAO and similar publications. Credit toward programs may be accepted from other agencies at the discretion of the college.
Final acceptance or rejection of transfer credits lies with the college. A minimum of 20 semester hours credit in the student's program of study must be earned at Mitchell to be eligible for graduation.

## Foreign Applicants

Proficiency in the English language and satisfactory academic records are important factors in the admission decision for all applicants from outside the United States. Foreign students must have graduated from a secondary school that is equivalent to secondary schools in the United States. Furthermore, the Test of English as a Foreign Language (TOEFL) and the College placement tests are required of all foreign applicants. Students should contact a university in their native land for information about the Test of English as a Foreign Language. Foreign applicants should write to the Admissions Office at Mitchell Community College for additional information.

## Residency Requirement

Under North Carolina Statute 116-142.1, a person must qualify as a resident for tuition lower than that for nonresidents. To qualify as a resident for tuition purposes, a person must become a legal resident and remain a legal resident for at least twelve months immediately prior to classification. Thus, there is a distinction between legal residence and residence for tuition purposes. Furthermore, twelve months legal residence means more than simple abode in North Carolina. In particular it means maintaining a domicile (permanent home of indefinite duration) as opposed to "maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education." The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification, who must show his or her entitlement by the preponderance (the greater part) of the residentiary information. Being classified a resident for tuition purposes is contingent on the student's seeking such status and providing all information that the institution may require in making the determination. Further information and necessary classification forms may be obtained from the Director of Admissions and Records.
Regulations concerning the classification of students by residence are set forth in "A Manual to Assist The Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes." A copy of the manual is available in the Office of the Dean of Student Services.

## Change of Program

Students who change from one program to another within the institution will have credit hours and quality points transferred according to the requirements of the new program. Only courses completed within the new program will be used to calculate the grade point average for graduation purposes.

## College Level Examination Program

Credit may be allowed for up to 20 semester hours of college work based on appropriate scores on the CLEP General Examination where appropriate to the student's program of study.

## The College Board Advanced Placement Program

Credit may be allowed for up to 20 semester hours of college work based on exams as given through the College Board Advanced Placement Program. Scores on the exams must be three, four, or five. Credit is allowed only if appropriate to the student's program of study.

## Military Service Experience

Veterans may receive credit for USAFI courses and for service school training where appropriate to the student's program and where a comparable course is offered by the college. USAFI courses are evaluated on the basis of the catalog of the USAFI. School Service Training is evaluated on the basis of A Guide to the Evaluation of Educational Experiences in the Armed Services, published by the American Council on Education. Credit, not to exceed two semester hours, is allowed for physical education to veterans upon presentation of discharge or separation papers appropriate to the veteran's course of study. Final acceptance or rejection of the credit lies with the college.

## Drug and Alcohol Policy

The abuse and use of drugs and alcohol are subjects of immediate concern in our society. These problems are extremely complex and ones for which there are no easy solutions. From a safety perspective, the users of drugs or alcohol may impair the well-being of all employees, students and the public at large; drug and alcohol usage may also result in damage to college property. Therefore, it is the policy of this college that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance or alcohol, is prohibited while in the workplace, on college premises, or as part of any college sponsored activities. Any employee or student violating this policy will be subject to disciplinary action up to and including termination or expulsion and referral for prosecution. The specifics of this policy are as follows: Mitchell Community College does not differentiate between drug users, drug pushers, or sellers. Any employee or student who possesses, uses, sells, gives, or in any way transfers a controlled substance while in the workplace, on college premises, or as part of any college sponsored activity, will be subject to disciplinary action up to and including termination or expulsion and referral for prosecution.
The term "controlled substance" means any drug listed in 21 CFR Part 1308 and other federal regulations, as well as those listed in Article V, Chapter 90 of the North Carolina General Statutes. Generally, these are drugs which have a higher potential for abuse. Such drugs include, but are not limited to, heroin, marijuana, cocaine, PCP and crack. They also include "legal drugs" which are not prescribed by a licensed physician.
If any employee or student is convicted of violating any criminal drug statute while in the workplace, on college premises, or as part of any college sponsored activity, he or she will be subject to disciplinary action up to and including termination or expulsion. Alternatively, the college may require the employee or student to successfully finish a drug abuse program sponsored by an approved private or governmental institution as a precondition for continued employment or enrollment at the college.
Each employee or student is required to inform the college, in writing, within five (5) work days after he or she is convicted for violation of any federal, state, or local criminal drug statute where such violation occurred while in the workplace, on college premises, or as part of any college sponsored activity. A conviction means a finding of guilt (including a plea of
nolo contender) or the imposition of a sentence by a judge or jury in any federal or state court.
Convictions of employees working under federal grants, for violating drug laws in the workplace, on college premises, or as part of any college sponsored activity, shall be reported to the appropriate federal agency. The College must notify the U.S. government agency, with which the grant was made, within ten (10) days after receiving notice from the employee or otherwise receives actual notice of a violation of a criminal drug statute occurring in the workplace. The college shall take appropriate disciplinary action within 30 days from receipt of notice. As a condition of further employment on any federal government grant, the law requires all employees to abide by this policy.
Students employed under the College Work Study Program are considered to be employees of the college, if the work is performed for the college in which the student is enrolled. For work performed for a federal, state, local public agency, a private nonprofit or a private for profit agency, students are considered to be employees of the college unless the agreement between the college and the organization specifies that the organization is considered to be the employer.
Any employee or student who unlawfully possesses, uses, sells or transfers alcoholic beverages to another person while in the workplace, on college premises, or as part of any college sponsored activity, will be subject to disciplinary action up to and including termination or expulsion and referral for prosecution.
If an employee or student is convicted of violating any alcoholic beverage control statute while in the workplace, on college premises, or as part of any college sponsored activity, he or she will be subject to disciplinary action up to and including termination or expulsion. Alternatively, the college may require the employee or student to successfully finish an alcoholic rehabilitation program, sponsored by an approved private or governmental institution as a precondition for continued employment or enrollment at the college. The term "alcoholic beverage" includes beer, wine, whiskey, and any other beverage listed in Chapter 188 of the General Statutes of North Carolina.

## Communicable Disease Policy For Mitchell Community College

Mitchell Community College places a high priority on the need to prevent the spread of serious communicable diseases on its campuses. The college is committed to educating its staff, students and the community, about serious communicable diseases. Specifically, because there is currently no cure or vaccine for Acquired Immune Deficiency Syndrome (AIDS), education regarding methods by which this virus may be transmitted and how to prevent transmission is essential. By adopting this policy, it is the intention of the college to promote the health and regular school attendance of its students so that they may attain their maximum potential for learning.
In keeping with the open access policy of Mitchell Community College, students with serious communicable diseases may attend college whenever, through reasonable accommodation, the risk of transmission of the disease and/or the risk of further injury to the student or to other students and/or faculty is sufficiently remote in such setting so as to be outweighed by the detrimental effects resulting from the exclusion of the students from college. Placement decisions will be made by using this standard in conjunction with current, available public health department guidelines concerning the particular disease in question. Individual cases will not be prejudged; rather, decisions will be made by health care professionals based upon the facts of the particular case. The determination of whether a student with a serious communicable disease may attend college shall be made by the President in accordance with procedures implemented by the College. The President's
decision shall be based upon expert medical advice and will include consultation with all interested parties.
The college shall respect the right to privacy of any student who has a serious communicable disease. The student's medical condition shall not be disclosed. If necessary, it is to be discussed only with the President or his designee and only to the extent necessary to minimize the health risks to the student and others on campus. The number of personnel aware of the student's condition will be kept to the minimum needed to assure proper care of the student and to detect situations in which the potential for transmission of the disease may increase. Persons deemed to have a "direct need to know" will be provided with the appropriate information; however, these persons shall not further disclose such information. Faculty may offer students the opportunity to reveal medical conditions as a matter of promoting the students' own safety in the event of an unexpected medical crisis while the students are on campus.

## - Continuing Education

Mitchell Community College strives to provide academic and occupational programs consistent with the educational needs of Iredell and surrounding counties. The college provides opportunities for people to further meet their educational goals by offering programs which enable people to pursue vocational, cultural, and civic interests. Courses include formal academic learning, cultural advancement, vocational and technical improvement, and personal enrichment.
Classes are generally held at the Continuing Education Center located at 701 West Front Street in Statesville. Continuing Education classes are also offered at the Mooresville Center, 219 North Academy Street in Mooresville and at various other locations throughout Iredell County.
Continuing Education Units (CEU's) are awarded for some classes. CEU's are not awarded for Adult Basic Education, Adult High School and craft classes. A CEU is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction." These units provide a means of recording and accounting for non-credit courses, programs and activities. Programs and courses within Continuing Education may be categorized as either Community Service, Occupational Extension, Basic Skills Programs, or Business and Industry Services. For information please telephone (704) 878-3220.

## Community Service

Community service programs are offered which contribute to the cultural, civic and personal enrichment of the citizens of Iredell County. Programs are sponsored which contribute to the quality of life of the community. Programs offered include; cultural enrichment and civic activities, academic courses and practical skills courses.

## Occupational Extension

Programs are offered in occupational extension that contribute to the economic development of the region. Training and upgrading of skills are provided for the specific requirements of individuals, businesses, and industries.

## Attendance

Class dates and times are publicized through brochures, the local newspaper, and on radio stations. Regular attendance should be maintained throughout a class. In general, 80 percent attendance is required to earn a certificate and satisfactory grade, but in some programs attendance requirements are higher.

## Fees and Supplies

There is generally a registration fee of $\$ 35.00$ for occupational courses and community service classes. Those students enrolled in courses for Basic Skills, volunteer fire department training, local law enforcement training, or the Department of Corrections are exempt from the registration fee. When self-supporting classes are sponsored, charges are whatever is necessary to pay for the class. Books and limited supplies are available through the college bookstore. Costs vary according to individual courses.

## Registration Fee Refunds

A refund shall not be made except under the following circumstances:

1. A student who officially withdraws from an extension class(es) prior to the first class
meeting will be eligible for a 100 percent refund. Also, a student is eligible for a 100 percent refund if an applicable class fails to "make" due to insufficient enrollment.
2. After the respective class begins, a 75 percent refund shall be made upon the request of the student if the student officially withdraws from the class prior to or on the 20 percent point of the scheduled hours of the class. Note: This rule is applicable regardless of the number of times the class meets or the number of hours the class is scheduled to meet. 3. For contact hour classes, a student who officially withdraws from an extension class(es) prior to the first class meeting will be eligible for a 100 percent refund. Also, a student is eligible for a 100 percent refund if an applicable class fails to "make" due to insufficient enrollment. After a contact hours class begins, a 75 percent refund shall be made upon the request of the student if the student officially withdraws from the class prior to 10 calendar days from the first day of the class(es).
3. Where a student, having paid the required registration fee for a quarter, dies during that quarter (prior to or on the last day of examinations of the college the student was attending), all registration fees for that quarter may be refunded to the estate of the deceased.

## Basic Skills Programs

Outlined below are the programs presently offered through the Mitchell Community College Division of Continuing Education.
Adult Basic Education (ABE) - designed to assist adults in the fundamentals of English, math, and reading. Upon completion of ABE, students may enroll in the GED Program. FEE: No Charge.
General Educational Development (GED)- High School Equivalency Program - designed to test a person's knowledge in five areas: English, math, reading, natural science and social studies. Upon satisfactory completion of tests, which are administered one week during each month, the Equivalency Diploma is issued by the North Carolina Department of Community Colleges. The GED is recognized as the equivalent of a high school diploma. To qualify for this program, you must:

1. Be a legal North Carolina resident;
2. Be at least 18 years old or 16 years old with a special need and completion of a form available from the GED examiner of the Continuing Education Office and permission from the superintendent of schools and parents. This form is to be notarized.
FEE: $\$ 7.50$ initial testing fee.
Learning Labs - provide adults with individually scheduled, planned and paced instruction.
Mitchell Community College has two Learning Labs - one located in Statesville at the Continuing Education facility and the other at the Mooresville Center.
Statesville Hours: Monday-Thursday 8:00 a.m. - 9:00
Mooresville Hours: Monday-Thursday 8:30 a.m. - 5:00 p.m.
FEE: No charge.
English As A Second Language/Citizenship - English as A Second Language is for foreign-born students who would like to improve their English communication skills, including speaking, reading, and writing. Preparation for U.S. citizenship is also available.

## Business and Industry Services

## Small Business Center

The purpose of the Small Business Center is to attract, train, counsel, and provide educational services for existing and prospective small business owners and employees. The mission of the Small Business Center is to be active in the economic growth of Iredell County by providing assistance to small businesses in order to increase the number of start-
ups, expand existing small businesses, and reduce the number of small business failures. Seminars, workshops, and courses designed for small business owners and employees are offered each quarter. Many of the seminars and workshops are provided at no cost to the participant or for a nominal fee. Expert presenters from all areas of North Carolina are brought to the campus to assist in meeting the training needs of small businesses. The Small Business Center also provides a wide array of courses in computer technology. A variety of short courses are available providing training on various software packages including: word processing, spreadsheets, databases, desktop publishing, computerized accounting, and presentation programs. The cost for these computer workshops is $\$ 50$ per session plus textbook.
In addition to educational programming, the center provides networking opportunities for clients with the many other resources available to assist the small business owner, particularly the Small Business Technology and Development Center, Winston-Salem State University.

## NEW and Expanding Industry

This program provides for the training needs of industries new to Iredell County and also for existing companies that are undergoing a major expansion which results in the addition of twelve or more new production jobs. The training program is administered by Mitchell Community College and serves the total college service area of Iredell County. The State of North Carolina funds the new and expanding industry program, with the funds being supplemental to the overall college operational budget.
The training programs are designed cooperatively with the industry and local college personnel with customization the primary criteria for meeting the particular needs of each industry. Flexible and custom-designed, the program can accommodate almost any job found in a manufacturing or service company.

## Focused Industrial Training

The Focused Industrial Training Program was created by the North Carolina Community College System to strengthen the partnership for training between the private industrial community and the local community college in an effort to maintain a trained workforce on an on-going basis. This program is able to address changes in new technologies by providing customized training.
Focused Industrial Training can serve the training needs of an existing industry's skilled and semi-skilled workers through a cooperative effort in assessing training need and delivery of training associated with industrial occupations. This program fills training needs which fall outside the guidelines for occupational extension, new and expanding industry, and the vocational and/or technical curriculum.

## Mooresville Center

The newly expanded Mooresville Center is located at 219 North Academy Street in Mooresville. The facility includes a Learning Lab which offers Basic Skills preparation and GED preparation, three computer labs which include the Matsushita Computer Room, a modern networking lab and classroom space for curriculum and continuing education classes.
Curriculum courses offered at the Mooresville Center throughout the year include: College Transfer, Accounting, Business Administration, Information Systems, Medical Assisting and Phlebotomy.
Other classes offered at the center include English as a Second Language (ESL), occupational extension courses, new and expanding industry training, community service courses,

Small Business seminars and a wide array of allied health classes.
The Mooresville Center hours of operation are from 8:00 a.m. to 10:30 p.m. Monday through Thursday and 8:00 a.m. to 4:00 p.m. on Friday. Weekend classes are scheduled on a regular basis. Please telephone the center at 663-1923 for further information.

## - Expenses

## Student Charges and Refunds

Mitchell Community College operates on the semester system. Students are required to pay all charges at the time of registration. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.
Tuition and fees for each semester are payable on or before the date of registration. Written verification for third party billing must be received by the Business Office before a student will be allowed to register without making payment at the time of registration. A student who has an outstanding balance due to the college is not eligible for re-registration.
No student will be allowed to graduate, receive a diploma or certificate, or a transcript of their records, nor will any information concerning their records be forwarded to any other institution or other person so long as the delinquent account is outstanding.

## General Guidelines For Student Charges and Refunds

Tuition: Current tuition charges are $\$ 20.00$ for in-state and $\$ 161.25$ for out-of-state per semester hour with a maximum charge of $\$ 280.00$ and $\$ 2257.50$ per semester respectively. Exceptions: Students who have paid tuition at one institution and who are given permission to transfer to another institution shall be issued a letter verifying payment has been made for the semester. The institution to which they are transferring will accept the permission letter in lieu of payment.
A student may enroll for the same semester at two or more institutions within the North Carolina Community College System. The total amount of tuition paid may not exceed the maximum charge. N.C. resident 65 or over are not required to pay tuition.
Refunds: Mitchell Community College issues tuition refunds according to the North Carolina state policy as published in section 2D. 0200 of the North Carolina Administrative Code. That code permits full tuition refunds to be made if a student withdraws prior to the beginning of the first day of classes. A 75 percent refund may be made upon request of the student if the student officially withdraws from the class(es) prior to or on the official 20 percent point of the class(es) or the 20 percent point of the semester if the student officially withdraws from the college. Request for refunds will not be considered after the 20 percent point. Student activity fees and special course fees are not refunded.
Students receive full refunds for classes canceled by the College.
If a student dies during the semester, all tuition and fees for the semester are refunded to the estate of the deceased.
Library Fines: A fee for lost books and over-due books is charged. If a lost book fee is charged and the book is later found and returned, the fee is refunded.
Graduation Fees: $\$ 30.00$ ( $\$ 10.00$ for each additional degree). These fees are non-refundable.
Audit Fee: Regular tuition charges apply for classes taken for audit.
Student fee: All students are charged $\$ 1.00$ per semester hour up to twelve credit hours (full-time).
All expenditures from these funds are related directly to student activities.
Exceptions: Persons who are employed as law enforcement officers are not charged a student activity fee. Documentation must be presented at the time of registration.
Transcripts: No transcript is released without the written permission of the student and twenty-four hours notice is required. Transcripts will not be released until all financial obligations to the College have been met.

Books: Cost of books will vary from program to program; however, most students pay an estimated $\$ 600$ for books for the academic year.
Special Fees: Fees, in addition to tuition, may be charged in some courses to cover the costs of supplies, facility charges, and materials. Students may also be required in certain courses to purchase tools and supplies. Fees are only refundable before the first day of the academic term.

## Veteran/Dependent/National Guard/ Reserve Assistance

Eligibility: Persons enrolled in an approved program at Mitchell Community College will be eligible to receive Veteran's educational benefits if they qualify.
Exclusions: Audited courses, independent study courses, credits by exam, courses taken outside of the curriculum, repeated courses with a passing grade, or any other courses not counted toward graduation will not be used in calculating hours for payment purposes.
Attendance: Recipients are paid while in class attendance. A student who withdraws from class must notify the Assistant Financial Aid Officer immediately to avoid overpayment. The student is responsible for notifying the Assistant Financial Aid Officer and the Director of Admissions and Records Office of any reason for non-attendance.
Standards of Progress: Recipients must meet the requirements for academic progress as set forth in the Catalog and the Student Handbook. Any recipient whose overall GPA in the current major is below school standards will be placed on academic probation. If at the end of the probationary semester school standards are again not met, a second semester of probation will be allowed. If at the end of the second probationary semester school standards have not been met, the student's enrollment will be terminated for unsatisfactory progress with the Department of Veteran Affairs and be referred to a Mitchell Community College counselor to set up conditional status guidelines. Counseling notes will be provided to the Asst. Financial Aid Officer. When the student has met the conditions as set forth by the counselor, the Asst. Financial Aid Officer will be notified, and the recipient will be eligible to be certified with the Department of Veteran Affairs at the beginning of the next semester.
Application Process: Students should apply for admission to Mitchell, contact high school and colleges attended to send official transcripts to Mitchell Community College, and provide the Admissions and Records Office with service schools or tests which may be evaluated for credit. Contact the Asst. Financial Aid Officer for an application for benefits and additional information needed for certification.

## Service Members Opportunity College

Having pledged to abide by the principles and criteria of Servicemembers Opportunity Colleges (SOC), Mitchell Community College has been designated as a Servicemembers Opportunity College.

## U.S. Army Reserve Officers Training Program

Mitchell Community College has a cooperative program administered by Davidson College. Detailed information on this program is available from the Department of Military Science, Davidson College, Davidson, N.C.

## Financial Aid Information

The purpose of financial aid is to provide access to students who would be unable to attend college without assistance. To apply for aid, a Free Application for Federal Student Aid (FAFSA) and an Institutional Financial Aid Application must be completed annually.

Application Procedures : Obtain a Free Application for Federal Student Aid (FAFSA) and an Institutional Financial Aid Application from high school counselors or the Mitchell Community College Financial Aid Office. Complete and mail the FAFSA. Return the Institutional Financial Aid Application to the Financial Aid Office. Be sure to list Mitchell Community College (Title IV Code 002947), 500 West Broad Street, Statesville, North Carolina in Section G of the FAFSA.
Scholarship decisions will be made by the Mitchell Community College Scholarship Committee. Students who have completed both the financial aid and admissions application processes will receive an award letter. Contact the Financial Aid Office for more information.
Types of Financial Aid Available: Federal Pell Grant, Federal Work-Study Program (FWS), Federal Supplemental Educational Opportunity Grant (FSEOG), State Student Incentive Grant (SSIG), Federal Stafford Loan, Scholarships, Scholarship/Loans, and Veteran's Educational Aid (See Veteran's Officer).
A student may receive several different awards. Grants are not repaid. Federal Work-Study awards must be earned as hourly wages for part-time work on campus.
Students taking fewer than 12 credit hours, but at least one credit hour, may receive aid reduced in proportion to their academic courseload. The interest rates and terms of the Federal Stafford Loans are disclosed by the lender. Mitchell Community College requires students who are interested in borrowing money to meet their college expenses to complete and return a budget to the Financial Aid Officer or his/her designee. A decision on whether or not to proceed with the loan process will be made during loan consultation. Students denied financial aid may request an explanation as to the basis for denial. Appeals due to academic ineligibility must be made in writing to the Financial Aid Officer.

Distribution: Recipients of Federal Pell Grant, FSEOG, and scholarships may charge their tuition, fees, books, and supplies against their financial aid eligibility for the semester for which they are registering. If their financial aid is greater than the expenses charged, a check is issued to the student on dates specified in the award letter.
Checks issued for the State Student Incentive Grant, Nurse Scholars Program, and Nurse Education Scholarship/Loan Program are available on the first day of class each semester. The Federal Stafford Loan checks are available for students no earlier than the first day of class each semester; however, a first year undergraduate student borrower who has not previously received a Federal Stafford Loan can not receive his first check any earlier than 30 days after the first day of class.
Transfer Student: If a student transfers to Mitchell from another school, a financial aid transcript must be submitted. In addition Mitchell Community College must be listed on the FAFSA in Section G. A borrower from the Federal Stafford Loan Program should check with the lender to be sure the loan can continue at the new school.
Satisfactory Academic Progress: Financial aid recipients must maintain the cumulative grade point average (GPA) as specified in the College Catalog on page 40 and complete 8 hours per semester if full-time ( $12+$ hours); 6 hours per semester if three-quarter time ( $9-11$ hours); or 4 hours per semester if half-time (6-8 hours).
Students failing to maintain the required hours completed and/or overall GPA will be placed on academic probation for two consecutive semesters. The Financial Aid Office will notify students by letter of their probationary status. Students will be required to make an appointment with a counselor for assistance or referral to the full range of student support services at Mitchell Community College including free tutoring, remedial and supplemental self-paced computer modules, counseling, and assistance with part-time employment opportunities.
If satisfactory academic progress has not been made by the end of the probationary period, the
student will be notified by letter of termination from financial aid. Financial aid assistance can be reinstated when the student meets the satisfactory academic progress guidelines at Mitchell Community College without receiving federal financial aid or by the appeal process. Appeals due to academic ineligibility must be made by letter 15 days prior to registration and should be addressed to the Financial Aid Officer. The Financial Aid Committee will review the appeal request and notify the student of their decision.
Maximum Time Frame: The student is allowed to receive federal financial aid for no more than $150 \%$ of the total hours required to complete a program. If a student changes majors the total hours continue to accrue until a program is completed.

## Student Life



## - Student Life

Mitchell Community College is committed to helping students develop to their fullest potential. With this goal in mind, the college strives to offer a comprehensive program in academics as well as social and cultural activities to build well-rounded persons. Students at Mitchell Community College are expected to conduct themselves in accordance with Federal, State, and local statutes. Mitchell Community College will cooperate with the respective law enforcement agencies in their enforcement. The CODE OF STUDENT CONDUCT AND STUDENT APPEALS procedure are detailed in the Student Handbook, which is distributed to each student enrolled in a curriculum program or course.

## Student Responsibility

While it is the role of the college to provide counseling services and academic advising to students, the responsibility for planning and pursuing a program of study rests with the student. Selecting courses as well as a field of study should be carefully considered by the student with the assistance and support of counselors, academic advisors, administrators, faculty and staff. The student is responsible for his or her persistence in pursuing a program of study to completion and for planning entry into a career or transfer to a senior institution.

## Student Records and Privacy Rights

Mitchell Community College must maintain accurate and confidential student records and must recognize the rights of students to have access to their educational and personal records in accordance with existing College policy and the Family Educational Rights and Privacy Act of 1974 (Buckley Amendment) and its revisions effective 1976.
"Educational Records" include files, documents, and other materials, which contain
information directly related to students. The term "educational records" does not include the following:
a. Records and documents of institutional personnel which are kept apart from educational records.
b. Records on the student which are made or maintained by a physician, psychiatrist, psychologist, counselor, or other recognized professionals or paraprofessionals acting in their official capacity.
c. Financial records on the parents of the student.
d. Records of instructional, supervisory and administrative personnel kept in their sole possession provided they are "not accessible or revealed to any other person except a substitute."

## Release of Student Educational Records

The following "Directory Information" may be made available to the public by the College without the student's written permission unless the student notifies the Office of Student Services in writing by the third week of the semester that such information concerning themselves is not to be made available.
a. Student's name, address, telephone number, and social security number.
b. Major field of study or program, club and sport activities.
c. Dates of attendance, degrees, diplomas, or awards received and the most recent previous educational institution.
d. Place of birth, weight, and height.

Faculty and administrative officers of the College who demonstrate a legitimate
educational need will be permitted to look at the official student file for a particular student.
Requests for confidential information shall not be honored without proper written consent. The written consent must specify the records or the specific data to be released and to whom it is to be released, and each request must be handled separately. Exceptions to this policy are:
a. Requests for confidential information will be honored without prior consent of the student in connection with an emergency.
b. Official requests in connection with the audit and evaluation of federal or state supported programs or in connection with enforcement of federal or legal requirements which relate to such programs.
c. An official order of a court of competent jurisdiction.
d. Subpoena. (Students will be notified immediately by registered mail that their records are being subpoenaed.)
e. Persons or organizations providing financial aid to the student or determining financial aid decisions.

## Control of Student Records

Transcripts and other information are released only with the written permission of the student. The only exception is that transcripts may be released by telephone request to another educational institution in which case the student receives written notification of such release. Students have the right to inspect their own records. Upon inspection students are entitled to an explanation of any information contained in their record. Students have the right to copies of academic records of credits earned at Mitchell. Copies of transcripts and/or other information from institutions other than Mitchell must be requested from the originating institution.
An official student file shall not be sent outside the Counseling Office, Records Office, Financial Aid Office, Veterans Affairs Office, Advisor's Office, or other custodial offices except in circumstances specifically authorized by the Dean of Student Services. The authorization for such special circumstances must be in writing. College officials responsible for the proper maintenance of education records include the Director of Admissions and Records and the Dean of Student Services.
A student who believes that information contained in records is inaccurate or misleading may request that the record(s) be amended. The request must be in writing and directed to the Dean of Student Services.

## Disabled Students

Special parking facilities are available to disabled students. Parking placards must be obtained from the North Carolina Department of Motor Vehicles.
All permanent instructional facilities are accessible to disabled students except the Art facilities. Special arrangements will be made for disabled students who desire to use these facilities.
The Affirmative Action Officer is the person to contact for additional information concerning facilities for the disabled. The office is in the Main Building.

## Equal Opportunity Policy Statement

Mitchell Community College shall continue to offer equal employment opportunities to its existing personnel and applicants for employment without regard to race, color, religion, sex, age, handicap, or national origin. The "open door" philosophy extends equal educa-
tional programs and instructional opportunities to the college's service area. Ongoing compliance with Federal and State Regulations shall be enforced with specific regard to:
(A) Age discrimination in Employment Act of 1967 (as amended)
(B) Civil Rights Act of 1968
(C) Civil Rights Acts of 1866 and 1871
(D) Title VI of Civil Rights Act of 1964
(E) Executive order No. 11246 (as amended)
(F) The Rehabilitation Act of 1973 (as amended: Sec. 503; Sec. 504)
(G) Title IX of Educational amendments of 1972
(H) Equal Pay Act of 1963 (as amended)
(I) Title VII of Civil Rights Act of 1964 (as amended)

Persons with concerns related to areas falling under Federal and State regulations should contact the Affirmative Action Officer, whose office is located in the Main Building, telephone number (704) 878-3202.

## Faculty Advisors

Upon completion of the admissions process each student is assigned an advisor. In program areas these advisors are the primary instructors. In the areas A.A., A.F.A., A.S., advisors are randomly assigned. Recognizing the advisee-advisor relationships are as important as classroom instruction, advisors are available daily for assistance in needed areas. Specialized assistance is available through the Dean of Student Services.

## Job Placement Services

Mitchell Community College offers job placement service to students for part-time or fulltime employment. The services of the Job Placement Office are available to current and graduating students, alumni, and prospective employers.
Graduating students are given counsel and assistance in preparing for job placement. Information pertaining to job opportunities is provided, along with assistance in gathering and presenting information to prospective employers. Further information may be obtained from the Job Placement Office.

## Counseling

Counseling and guidance services are provided by the college to aid students in determining their vocational and educational programs as well as assisting in resolving problems of a personal nature which might affect progress toward educational objectives. Professionally trained counselors are available.

## Intramurals

A number of intramural competitions are organized for students by the Student Government Association and Student Services personnel.

## Student Organizations

Mitchell Community College encourages students to be active in affairs of the institutions. Through organizations, the student will find opportunities for entertainment, making new friends, leadership, and service to the college community.
All student organizations must be approved by the administration and Student Government Association. Each organization must have a copy of its constitution or purpose which includes a statement of open membership without regard to race, color, religion, handicap, sex, creed, or national origin. The names of a faculty advisor must be on file with the

## Student Government Association

The purpose of the Student Government Association is to help each student develop a personal sense of pride for and responsibility to the college, and to accept his democratic responsibilities as an American citizen.
The Student Government Association acts as an intermediary between the student body and the administration of the college, serving as a student forum representing the student to the college faculty and administration. It also cooperates with the administration in the coordination and the supervision of student activities. All students who pay activity fees are members of the Student Government Association. The Constitution and the Student Code of Conduct are found in the Mitchell Community College Student Fíandbook.

## Student Grievance and Appeals

The student grievance and appeals procedure provides a system to channel student complaints and requests to appropriate college officials. The Student Rights, Responsibilities and Judicial Procedures policy as published in the Student Handbook establishes a student's right to inquire about and to propose changes to the policies, regulations and procedures affecting the welfare of students.
Students should refer to the Handbook for policies governing academic honesty, sexual harassment, ADA grievance procedure, disciplinary procedure, and student rights and code of conduct. Students may also file a grievance with the Commission on Colleges (SACS), 1866 Southern Lane, Decatur, GA 30033-4097: Telephone (404) 679-4501.

## The Learning Resources Center

The Learning Resources Center provides resources and services which support the instructional program at Mitchell. Services include reference assistance, book selection, and interlibrary loans. Audiovisual services include equipment for viewing and listening and production facilities. A coin-operated copier, microfilm reader/printer, and microfiche reader/printer are available for students. The "History Room" holds a combination of the history of Mitchell College, Iredell County and North Carolina.

## Health and Wellness

Students at Mitchell Community College are encouraged to notify the college of medical conditions by a statement on the application form. There is also a space on the same form that requests students to provide the college with information about whom to contact in case of an emergency. The college has a communicable disease policy and a drug and alcohol policy in the College Catalog and The Student Handbook.
Medical emergencies are managed by the Iredell County EMS and the Emergency Care Units of Columbia Davis and Iredell Memorial Hospitals. First aid kits are available in all work areas for minor injuries.
Health education courses and physical education activity courses are taught by curriculum faculty members in the Physical Education Division.
In addition to formal coursework the college maintains a busy schedule of health education offerings. There is an annual health fair that provides free health screenings for students. There are educational publications and posters in a variety of campus locations that relate to drug and alcohol issues as well as other health concerns. There are also educational workshops for students about specific diseases and conditions.
Counselors in the Student Services area maintain lists of health professionals and assist
students by making appropriate referrals.

## Appeal Process Specific To Semester Conversion

On the work day between late registration and the first day of class, a group of five faculty/ staff members will be available at a designated hour to hear appeals relative to the transfer of academic credit from the quarter system to the semester system.
The Dean of Student Services will be responsible for the physical arrangements, scheduling and publicizing the process.
The Dean of Curriculum Programs will appoint the members of the committee. The committee will function for the first four to six semesters and will deal only with transcript issues relative to semester conversion. All other issues will be handled through the established appeal process.
If a student wishes to appeal a ruling of this special committee, he/she will use the appeal process described in The Student Handbook.

## Student Rights

All rights and privileges guaranteed to every citizen by the Constitution of the United States and by the state of North Carolina shall not be denied any student. Students are free to pursue their educational goals. Appropriate opportunities for learning in the classroom and on the campus shall be provided for by the college. Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.
Students have the right to freedom of expression, inquiry, and assembly without restraint or censorship subject to reasonable and nondiscriminatory rules and regulations regarding time, place, and manner.
Students have the right to inquire about and to propose improvements in policies, regulations and procedures affecting the welfare of students through established student government procedures, campus committees, and college offices.
The Family Educational Rights and Privacy Act of 1974 provides safeguards regarding the confidentiality of and access to student records, and this Act will be adhered to by the college. Students and former students have the right to review their official records and to request a hearing if they challenge the contents of these records. No records shall be made available to unauthorized personnel or groups outside the college without the written consent of the student involved, except under legal compulsion.
No disciplinary sanctions other than temporary removal from class or activity (only for duration of said activity) may be imposed upon any student without due process. Due process procedures are established to guarantee a student accused of a Student Code of Conduct violation the right of a hearing, a presentation of charges, evidence for charges, the right to present evidence, the right to have witnesses on one's behalf and to hear witnesses on behalf of the accuser(s), the right to counsel, and the right of appeal.

## Student Code of Conduct

The college reserves the right to maintain a safe and orderly educational environment for students and staff. Therefore, when, in the judgment of college officials, a student's conduct disrupts or threatens to disrupt the college community, appropriate disciplinary action will be taken to restore and protect the sanctity of the community.
Students are expected to conduct themselves in accordance with generally accepted standards of scholarship and morality. The purpose of this code is not to restrict student rights but to protect the rights of individuals in their academic pursuits.
The following regulations set forth rules of conduct which prohibit certain types of student
behavior. Violation of one or more of the following regulations may result in one of the sanctions described in The Student Handbook.
A. Academic Dishonesty - taking or acquiring possess of any academic material (test information, research papers, notes, etc.) From a member of the college staff or student body without permission; receiving or giving help during tests; submitting papers or reports (that are supposed to be original work) that are not entirely the student's own; not giving credit for others' work (plagiarism).
B. Theft of, misuse of, or damage to college property, or theft of or damage to property of a member of the college community or a campus visitor on college premises or at college functions; unauthorized entry upon the property of the college or into a college facility or a portion thereof which has been restricted in use and thereby placed off limits; unauthorized presence in a college facility after closing hours.
C. Possession of or use of alcoholic beverage or being in a state of intoxication on the college campus or a college-sponsored or supervised functions off campus or in collegeowned vehicles. Possession, use or distribution of any illegal drugs. Any influence which may be attributed to the use of drugs or of alcoholic beverages shall not in any way limit the responsibility of the individual for the consequences of his/her actions. (Refer to the Drug and Alcohol Policy)
D. Lewd or indecent conduct, including public physical or verbal action or distribution of obscene or libelous written material.
E. Mental or physical abuse of any person on college premises or at college-sponsored or college-supervised functions, including verbal or physical actions which threaten or endanger the health or safety of any such persons or which promote hatred or racial prejudice.
F. Any act, comment, or behavior which is of a sexually suggestive or harassing nature and which in any way interferes with a student's or any employee's performance or creates an intimidating, hostile or offensive environment.
G. Intentional obstruction or disruption of teaching, research, administration or disciplinary proceedings, or other college activities, including public service functions and other duly authorized activities on college premises.
H. Occupation or seizure of any manner of college property, a college facility or any portion thereof for a use inconsistent with prescribed, customary, or authorized use.
I. Participating in or conducting an assembly, demonstration or gathering in a manner which threatens or causes injury to person or property; which interferes with free access to, ingress or egress of college facilities; which is harmful, obstructive or disruptive to the educational process of institutional functions of the college; remaining at the scene of such an assembly after being asked to leave by a representative of the college staff.
J. Possession or use of a firearm, incendiary device or explosive, except in connection with a college-approved activity. This also includes unauthorized use of any instrument designed to inflict serious bodily injury to any person.
K. Setting off a fire alarm or using or tampering with any fire safety equipment, except with reasonable belief in the need for such alarm or equipment.

## L. Gambling

M. Smoking and/or using other forms of tobacco products in classrooms, shops, and labs or other unauthorized areas.
N. Violations of college regulations regarding the operation and parking of motor vehicles.
O. Forgery, alteration, or misuse of college documents, records or instruments of identification with intent to deceive.
P. Failure to comply with instructions of college officials acting in performance of their duties.
Q. Violation of the terms of disciplinary probation or any college regulation during the period of probation.
R. Fiscal irresponsibility such as failure to pay college-levied fines, failure to repay college-funded loans or the passing of worthless checks to college officials.
S. Violation of a local, state or federal criminal law on college premises adversely affecting the college community's pursuit of its proper educational purposes.

## Academic Policies



## - Academic Policies

## Semester System

Mitchell operates on a three semester system. The fall and spring semesters are each sixteen weeks in length and the summer semester is ten weeks in length. The college is in session five days a week.
Semester hours credit is awarded as follows: Credit of one semester hour is awarded for each 16 hours of class work; credit of one semester hour is awarded for each 32 or 48 hours of laboratory work; and credit of one semester hour is awarded for each 48 hours of clinical practice. Credit of one semester hour is also awarded for 160 hours of work experience such as cooperative education, practicums, and internships.

## Registration

All students are required to register at the beginning of each semester of attendance. Students may not attend courses for which they are not officially enrolled. Formal completed enrollment is based on the official class rosters generated by the Admissions and Records Office as soon as possible after registration.

## Change of Schedule

Changes in a class schedule after registration must be made in the office of the Director of Admissions and Records. The last day that courses may be added each semester is stated on the college calendar. Any student wishing to drop a course must complete the drop form which is processed through the office of the Director of Admissions and Records and the Business Office.

## Student Course Load

Students must register for 12 semester hours to be considered full-time, and the course load must not drop below these hours per semester. These requirements are minimal to receive full VA benefits.
The normal course load varies with each program. For A.A., A.S., or A.F.A. the course load is 16 credit hours per semester while the normal course load for any A.A.S. technical program is 18 credit hours per semester.
Students may not register for more than 21 credit hours without approval of the Dean of Student Services. Approval of an overload will be determined on the basis of past academic achievement of the student.
Students who are employed while attending college should consult with their faculty advisor to determine an appropriate course load.

## Classification

Students are classified as freshmen from initial enrollment until 30 semester hours credit have been earned, at which time they are classified as sophomores. For student activities purposes, students must have been enrolled for a minimum of two semesters before they are classified as sophomores.

## Attendance Policy

Regular class attendance is considered to be a vital ingredient in scholastic achievement and is one of the many responsibilities of the college student. As a result, the student is expected to be in attendance for each class meeting unless prohibited by uncontrollable events. No absence $\frac{\text { exempts the student from completing the work assigned during the absence. The student will }}{38}$
assume the responsibility of determining what work was missed. Students anticipating an absence should contact their instructors in advance to make necessary arrangements.
The instructor is responsible for informing students in writing of the class attendance policy at the beginning of each semester.
The instructor will inform the Admissions and Records Office when a student fails to comply with the attendance policy of the class or fails to attend for two consecutive weeks. The instructor will assign a grade of " $F$ " at the end of the semester to any student who has not complied with the class attendance policy or has failed to attend for two consecutive weeks. Students will receive a "W" instead of an " $F$ " if they complete the proper withdrawal form in Student Services.

## Withdrawal Policy

In order to officially drop a single course, a student must submit a completed drop form, signed by the instructor and the advisor, to Student Services. The last day to drop a class is at the $60 \%$ point of the semester. The exact date for each academic term is published in the Student Handbook and on page 6 of the Catalog.
In order to officially withdraw from school, a student must submit a completed withdrawal form to the Admissions and Records Office.
A student may drop a course or withdraw from all courses up to and including the published date to drop or withdraw with a grade of "W". A student who fails to drop or withdraw officially will receive a grade of " $F$ " for any course not completed satisfactorily.
NOTE: Failure to attend class or to notify the instructor does not constitute an official drop or withdrawal.

## Grading System and Grade Point Average

The 4.00 grade point system is used to calculate student grade point averages. The letter grades used are:

A Excellent - 4 grade points per semester hour
B Good - 3 grade points per semester hour
C Average - 2 grade points per semester hour
D Passing - 1 grade point per semester hour
F Failed - No grade points per semester hour

- Institutional Credit Only

CE Credit by Examination
I Incomplete - Work must be completed satisfactorily within the next semester, except that, where circumstances warrant, the instructor may approve an extension of time up to one year from the closing date of the course. If the "I" has not been removed by the designated date, a grade of "F" will be recorded.

W Withdrawal - Denotes official withdrawal from school.
AU Audit - No grade points.
NS No Show - Recorded for students who register for classes, but do not attend at least one class session prior to the $20 \%$ point.
The grade point average is calculated by dividing the total number of quality points earned by the total number of semester hours attempted, including both courses passed and failed, unless the courses have been repeated. When a course is repeated, the last grade earned will be included in calculating the GPA. All courses attempted will be shown on the official transcript.
A "C" average is required for graduation. On the 4.00 grade point system, a "C" average is a 2.00 grade point average.
A letter grade followed by a [ $\bullet$ ] is given for developmental courses. Institutional credit only
is awarded. Hours are not counted toward graduation and are not figured in the student's grade point average.

## Course Examinations

A final exam is required in every course. The examination schedule is published by the Director of Admissions and Records's office and all exams are required to be held during the published hours.

## Grade Reports

Records of progress are kept by this institution on veteran and non-veteran students alike, and progress records are furnished to all students at the end of each scheduled school semester.

## Dean's List

The Dean's List is published at the end of each semester. It is published as follows:
Full-Time - Any student enrolled for at least twelve semester hours and earns a grade point average of 3.5 or better with no grade below "C" will be on the Full-Time Dean's List for that semester.
Part-Time - Any student enrolled for at least six semester hours, but less than twelve, and earns a grade point average of 3.5 or better with no grade below " C " will be on the PartTime Dean's List for that semester.

## Graduation Honors

High Honors - A student who has a cumulative grade point average of 3.75 or greater with no grade below a "C" will receive High Honors at graduation.
Honors - A student who has a cumulative grade point average of 3.50 to 3.74 with no grade below a "C" will receive Honors at graduation.
At least fifty percent of the curriculum requirements must be completed at Mitchell Community College to be eligible for honors at graduation. Certificate programs do not qualify for honors.

## Graduation Marshals

The graduation marshals are those freshmen enrolled in a program of study who have the highest grade point averages, have earned a minimum of 12 semester hours. They will assist in graduation exercises and other college events.

## Satisfactory Academic Progress

The following scale will be used as a basis for determining a student's status for certification purposes to the Department of Veteran Affairs, Social Security, Vocational Rehabilitation, student loans and scholarship agencies, conditional status, and other private or agencies requiring such information.

1. Attain a 2.00 GPA for the current academic term, or
2. Meet one of the following retention standards:

| Up to 15 hours attempted | 1.25 Overall GPA |
| :--- | :--- |
| $16-23$ hours attempted | 1.50 Overall GPA |
| $24-31$ hours attempted | 1.75 Overall GPA |
| 32 hours and above | 2.00 Overall GPA |
| Graduation | 2.00 Overall GPA |

Students receiving financial aid must maintain satisfactory academic progress to continue receiving aid. The total hours attempted are utilized in the computation of the overall accumulative grade point average. This includes both courses passed and failed, unless the course has been repeated. When the course is repeated, the last grade earned will be included in the calculation of the grade point average. For further information, see the Financial Aid Section of the Catalog.
Students receiving Veteran's educational benefits must meet the requirements for academic progress as set forth above. If veterans do not meet this requirement, they will be placed on academic probation. For detailed information see the Veterans Section of the Catalog. Students enrolled in the Nursing Program should see the "Nursing Policy and Procedure Manual," PROGRESSION POLICY.

## Course Requirements

Mitchell Community College has established prerequisite requirements for selected courses. The prerequisite requirements are required of all students, including special students, who enroll in the courses. The purpose of the prerequisite preparation is to insure that students have adequate academic/experiential preparation to successfully complete the course.

## Student Retention

Mitchell Community College makes every effort to assist enrolled students to achieve their academic goals. Academic evaluation and appropriate course placement is the basis of the retention efforts. Additional retention efforts include a comprehensive program of student financial aid, an academic advising system that assigns any program student to an advisor, the availability of professional counselors, a full open lab that provides both tutoring and individualized self-instructional modules and a student success course emphasizing study skills. This course is required of all developmental students.
These efforts have resulted in a semester-to-semester student retention rate that is among the highest in the North Carolina Community College System.

## Credit By Examination

Students whose special knowledge/skills qualify them to accelerate in their studies and are currently enrolled may receive credit by examination in selected courses.
A student who successfully completes a credit by examination will be awarded a grade of 'CE' and credit hours for the course, but quality points will not be awarded. The grade is not included in the grade point average.
Students requesting this type of credit must use the following procedure:

1. Obtain a credit by examination form and approval from the Office of the Dean for Curriculum Programs.
2. Present evidence that previous experience or training indicates probable success on the examination.
3. Check with the Office of Admissions and Records for the proper procedures to obtain credit and pay tuition and fees.

## Advanced Placement for High School Courses

Students entering Mitchell Community College from Iredell/Statesville Schools, or Mooresville Graded Schools may be awarded advanced placement credit as provided in an agreement between these school systems and Mitchell Community College.
Advanced placement credit based on high school achievement may be allowed to students enrolling in specified programs. Details concerning specific requirements are available from
counselors at the high schools and at Mitchell Community College.
Students enrolled in the Nursing Programs, please see the Nursing Policy and Procedure Manual.

## Developmental Education Program

The goal of the Developmental Education Program is to meet the challenge of the college's "open door" admissions policy, which brings students of varying educational needs and abilities to the campus, and to fulfill the college's purpose "to be of optimum educational and cultural service to the people within its geographical area." The college is committed, through the Developmental Education Program, to providing ample opportunities for all students to meet their educational needs. The program offers to students course work, Mind Lab opportunities, and counseling designed to both remediate specific academic weaknesses and to develop other skills necessary to succeed in college. Upon completion of the developmental work prescribed as a result of placement testing, students will be better prepared for the demands of their chosen curriculum.

## The Career Center

The following services/activities are provided by Mitchell Community College's Career Center:
Job Openings:
An up-to-date list of full- and part-time job vacancies is maintained.
Career Assessment:
Assistance is provided in helping individuals identify jobs/careers that match their interests, skills, abilities and personalities.
Job Readiness Training:
Students are taught how to develop a job search plan, complete resumes and conduct successful job interviews.
Career Library:
The following information is available: job descriptions, salaries, education/training requirements, and job outlook.
Computerized Career Decision-Making Information:
With the aid of the computer, individuals are guided through a series of activities that facilitate career decision-making.
College Catalogs
Catalogs from all North Carolina two-year and four-year colleges and universities are housed in the Career Center.
For assistance/information, call (704) 878-3242.

## The Mitchell Instructional and Developmental Laboratory

The MIND Lab provides assistance in course work to curriculum students. Writing help and tutoring assistance in all course work are the primary services offered. Computers are available to students for composing and printing papers as well as to study through use of computer tutorial modules.
The MIND Lab hours are posted each semester on the door of the Lab.

## Charlotte Area Educational Consortium

Mitchell Community College is a member of the Charlotte Area Educational Consortium (CAEC) which exists for the purpose of fostering attainment of the highest level of collegiate education for students in the Charlotte metropolitan area. CAEC has as a portion of its purpose:

- to afford students access to broader educational experiences both curricular and extracurricular.
- to encourage multi-instructional use of faculty, equipment, and facilities where feasible.
- to act as a forum for sharing information and important events.

Of special interest to Mitchell Community College students is the Consortium Student Exchange program. This program allows, under specific guidelines, for students of member institutions to take courses at other member institutions when such courses are not available at the student's home institution. This means full-time Mitchell students may enroll in approved courses for no additional tuition charges at any of the participating institutions. The Director of Admissions and Records at Mitchell will provide specific guidelines and necessary forms for this program.
Participating Institutions are:

Barber-Scotia College
Belmont Abbey College
Catawba College
Central Piedmont Community
College
Davidson College
Gaston College
Johnson C. Smith University
Lenoir-Rhyne College
Livingston College
Mitchell Community College

Pfeiffer College<br>Queens College<br>Rowan-Cabarrus Community College<br>Stanly Community College<br>University of North Carolina at Charlotte<br>University of South Carolina<br>at Lancaster<br>Wingate College<br>Winthrop University<br>York Technical College

## Telecourses

Telecourses provide Mitchell Community College students with the opportunity to begin or continue their education by using study materials and watching television at home. As a complete learning system designed for home or off-campus use, the telecourse contains the same basic content found in the on-campus course. The televised lessons often allow demonstrations unavailable in a traditional classroom setting. In addition to the televised lessons, the telecourse requires an on-campus orientation, a textbook, a study guide, tests, written assignments, on-campus review sessions, and student-instructor communications. Veteran students who wish to enroll in telecourses at Mitchell Community College for certification of educational benefits to the Department of Veteran Affairs must meet the following guidelines:

The student must complete 12 semester hours of graduation requirements at Mitchell Community College in the current major and have an overall GPA of 2.00 or higher prior to enrolling in a telecourse.

The student must be enrolled in at least one other course counting toward graduation requirements in the current major in conjunction with the telecourse.

The student must attend the review sessions and required orientation session and communicate with the instructor at least once a week. (NOTE: the telecourse instructor's signature will be required on the Veteran's attendance sheets to be turned in to the Veteran's Coordinator approximately every three weeks.)

## Auditing Classes

Classes may be audited with permission of the instructor if space is available; however, no class may be audited more than once. The audit may occur either before or after taking the course for
credit. No credit by examination can be allowed for courses that have been audited. A grade of "AU" will be recorded with no credit hours or quality points awarded. Registration or changes in registration for audits must be completed during the regular registration or change periods. Regular tuition and fees will be charged.

## Repeating Course Work

Any course in which an " $F$ " or " $D$ " is received may be repeated until a grade of "C" or better is earned. The last grade earned will be used in calculating the GPA. All courses attempted will be shown on the official transcript.
No course may be counted for credit more than once.
In those cases where a course in which the student received an " $F$ " is not offered during the remainder of that student's residence, an equivalent course may be substituted upon recommendation of the Dean of Curriculum Programs for purposes of meeting program requirements.
Exceptions must be approved by the Vice-President for Instruction.

## Course Substitutions

No course substitutions may be made and no graduation requirements may be waived without recommendation from the program director and the Dean for Curriculum Programs.

## Transcripts

An official transcript of work at Mitchell Community College will be sent to the appropriate institution upon written request by the student. No transcript will be released until all financial obligations to the College have been met.

## Graduation Requirements

The following requirements apply to programs; however, some divisions may have additional requirements applicable only to that division.

1. Students in the programs awarding diplomas are required to reach a reading proficiency level. Students in programs awarding the Associate in Arts, Associate in Fine Arts, Associate in Science, or Associate in Applied Science degrees are required to make satisfactory scores on the reading placement test, or successfully complete reading requirements.
2. Students may graduate under the catalog upon which they enter or any subsequent catalog in effect while they remain in continuous enrollment. Upon changing from one program to another within the college, students must graduate under the catalog in effect at the time they change or any subsequent catalog while they remain in continuous enrollment. Continuous enrollment excludes summer semester. During the academic year 1997-98 and 1998-99 due to special circumstances associated with the change to the semester system and the new academic programs of study graduation requirements will be determined on an individual basis.
3. Along with the appropriate number of hours earned and the completion of all required courses for their specific program, students must have a 2.0 grade point average in order to graduate and receive a degree, diploma, or certificate.
4. Application for graduation and payment of graduation fees must be made during the registration period for the student's last semester.
5. Presence at graduation is a requirement. When attendance is impossible, the student may petition, in writing, the Dean of Student Services for permission to graduate in absentia.
6. A minimum of 20 semester hours credit in the student's program of study must be earned at Mitchell Community College in order to be eligible for graduation.
7. A maximum of 7 semester hours credit may be earned at another institution and accepted for graduation purposes after a student transfers from Mitchell Community College.
8. To be eligible for graduation, the student must fulfill all financial obligations to the College.

## Academic Honesty

Mitchell Community College is committed to academic excellence which strengthens pride, integrity, and self-realization. Such acts as plagiarism (presenting the words, graphics, structure, or ideas of others as if they were one's own without proper acknowledgment or documentation) and taking answers from another student's test paper are subject to disciplinary action. Any form of academic dishonesty is unacceptable and if detected could result in disciplinary action.

## Curriculum Programs



## Mitchell Community College

## Programs Of Study

Fall 1997

## Program Title

Associate in Arts (A.A.)
Associate in Fine Arts (A.F.A.)
Associate in Science (A.S.)
Associate in Applied Science (A.A.S.)
Accounting
Associate Degree Nursing
Business Administration
Business Administration - Operations Management Tech. (Concentration)
Criminal Justice Technology
Electrical/Electronics Technology
Electronics Engineering Technology
Human Services Technology
Industrial Maintenance Technology
Information Systems
Information Systems - Programming (Concentration)
Manufacturing Engineering Technology
Mechanical Drafting Technology
Medical Assisting
Office Systems Technology

## Diploma

Air Conditioning, Heating \& Refrigeration Technology
Cosmetology
General Occupational Technology
Welding Technology
D35100
D55140
D55280
D50420

## Certificate

Basic Law Enforcement Training C55120
Nursing Assistant C45480
Phlebotomy C45600

## Collaborative Agreement

Motorsports Management Technology (Pending Approval)
Speech-Language Pathology Assistant
Program Code
A10100
A10200
A10400

A $25100^{\circ}$
A45120
A 25120
A2512G
A55180
A35220
A40200
A45380
A50240
A25260
A2526E
A40300
A50340
A45400
A25360


# Curriculum Programs Of Study 

# Associate in Arts (A.A.) [A10100] <br> Degree Requirements 

## General Education Core ( 44 SHC )*

A. English/Communications<br>6 SHC

Required:
ENG 111 Expository Writing 3
Select one:
ENG 112 Argument Based Research 3
ENG 113 Literature Based Research 3
ENG 114 Professional Research \& Reporting 3

## B. Humanities/Fine Arts

12 SHC
Select four courses from at least three of the following discipline areas: music, art, foreign languages, literature, philosophy and religion. At least one course must be a literature course
$\left.\begin{array}{lllllll}\text { ART } & 111 & \text { Art Appreciation } & 3 & \text { MUS 110 } & \text { Music Appreciation } & 3 \\ \text { ART } & 114 & \text { Art History Survey I } & 3 & \text { PHI } & 215 & \text { Philosophical Issues }\end{array}\right\} 3$
C. Social/Behavioral Sciences 12 SHC

Select four courses from at least three of the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology. At least one course must be a history course.

| ANT | 210 | General Anthropology | 3 | POL | 120 | American Government | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ECO | 251 | Prin. of Microeconomics | 3 | POL | 210 | Comparitive Government | 3 |
| ECO | 252 | Prin. of Macroeconomics | 3 | POL | 220 | International Relations | 3 |
| GEO | 111 | World Regional Geography | 3 | PSY | 150 | General Psychology | 3 |
| GEO | 113 | Economic Geography | 3 | PSY | 241 | Developmental Psychology | 3 |
| GEO | 130 | General Physical Geography | 3 | PSY | 281 | Abnormal Psychology | 3 |
| HIS | 121 | Western Civilization I | 3 | SOC | 210 | Introduction to Sociology | 3 |
| HIS | 122 | Western Civilization II | 3 | SOC | 213 | Sociology of the Family | 3 |
| HIS | 131 | American History I | 3 | SOC | 220 | Social Problems | 3 |
| HIS | 132 | American History II | 3 | SOC | 225 | Social Diversity | 3 |

D. Natural Sciences/Mathematics
Natural Sciences ( 8 SHC): Select two courses, including accompaning laboratory work, from among the biological and physical science disciplines.
Mathematics ( 6 SHC): Select at least one course in introductory mathematics (college algebra, trigonometry, calculus, etc.); the other unit may be selected from among other quantitative subjects, such as computer science and statistics.

| BIO | 111 | General Biology I | 4 | MAT | 263 Brief Calculus | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 4 | MAT | 271 Calculus I | 4 |
| CHM | 151 | General Chemistry I | 4 | MAT | 272 Calculus II | 4 |
| CHM | 152 | General Chemistry II | 4 | MAT | 273 Calculus III | 4 |
| CIS | 115 | Intro to Prog \& Logic | 3 | PHY | 151 College Physics I | 4 |
| MAT | 151 | Statistics I | 3 | PHY | 152 College Physics II | 4 |
| MAT | 161 | College Algebra | 3 | PHY | 251 General Physics I | 4 |
| MAT | 162 | College Trigonometry | 3 | PHY | 252 General Physics II | 4 |
| MAT | 175 | Precalculus | 4 |  |  |  |

Other required hours ( 20-21 SHC)
A. Required:

ACA 111 College Student Success 1 SHC
Two Physical Education Courses 2-3 SHC
to be selected from the following:

| PED | 110 | Fit \& Well for Life 2 | PED 132 | Racquetball - Beginning | 1 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PED | 111 | Physical Fitness I | 1 | PED 133 | Racquetball - Intermediate | 1 |
| PED | 113 | Aerobics I | 1 | PED 137 | Badminton | 1 |
| PED | 114 | Aerobics II | 1 | PED 139 | Bowling - Beginning | 1 |
| PED | 117 | Weight Training I | 1 | PED 142 | Lifetime Sports | 1 |
| PED | 121 | Walk, Jog, Run | 1 | PED 143 | Volleyball - Beginning | 1 |
| PED | 128 | Golf - Beginning | 1 | PED 144 | Volleyball - Intermediate | 1 |
| PED | 129 | Golf - Intermediate 1 | PED 145 | Basketball - Beginning | 1 |  |
| PED | 130 | Tennis - Beginning 1 | PED 146 | Basketball - Intermediate | 1 |  |
| PED | 131 | Tennis - Intermediate |  |  |  |  |

## B. Other Required Hours

17-18 SHC
Courses must be chosen from the above lists of humanities/fine arts, social/behavioral sciences, and the natural sciences/mathematics courses that have not already been used to satisfy the Core requirements. These hours can be selected according to the student's proposed major and the requirements of the senior institution to which the student intends to transfer. One SHC in Co-Op can be chosen for career exploration.

Total Semester Hours Credit (SHC) in Program: 64-65 SHC

# Associate in Fine Arts (A.F.A.) [A10200] Degree Requirements 

## General Education Core ( $\mathbf{2 8} \mathbf{~ S H C}$ )

## A. English/Communications

| Required: |  |  |
| :--- | :--- | :--- |
| ENG 111 | Expository Writing |  |
| Select one: |  |  |
| ENG 112 | Argument Based Research | (3) or |
| ENG | 113 | Literature Based Research |
|  | (3) |  |

## B. Humanities/Fine Arts

Select two courses from the following list in two of these discipline areas: music, foreign language, literature, philosophy, religion.
One course must be a literature course.

| ENG 131 | Introduction to Literature | 3 | FRE 211 | Intermediate French I | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENG 231 | American Literature I | 3 | FRE 212 | Intermediate French II | 3 |
| ENG 232 | American Literature II | 3 | MUS 110 | Music Appreciation | 3 |
| ENG 233 | Major American Writers | 3 | PHI 215 | Philosophical Issues | 3 |
| ENG 241 | British Literature I | 3 | REL 110 | World Religions | 3 |
| ENG 242 | British Literature II | 3 | REL 211 | Intro. to Old Testament | 3 |
| ENG 251 | Western World Literature I | 3 | REL 212 | Intro. to New Testament | 3 |
| ENG 252 | Western World Literature II 3 | SPA 111 | Elementary Spanish I | 3 |  |
| FRE 111 | Elementary French I | 3 | SPA 112 | Elementary Spanish II | 3 |
| FRE 112 | Elementary French II | 3 | SPA 211 | Intermediate Spanish I | 3 |
|  |  |  | SPA 212 | Intermediate Spanish II | 3 |

C. Social/Behavioral Sciences 9 SHC

> Select three courses from the following list in three of these discipline areas:
anthropology, economics, geography, history, political science, psychology or sociology.
One course must be a history course.

| ANT 210 | General Anthropology | 3 | POL 120 | American Government | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ECO 251 | Prin. of Microeconomics | 3 | POL 210 | Comparative Government | 3 |
| ECO 252 | Prin. of Macroeconomics | 3 | POL 220 | International Relations | 3 |
| GEO 111 | World Regional Geography | 3 | PSY 150 | General Psychology | 3 |
| GEO 113 | Economic Geography | 3 | PSY 241 | Developmental Psychology | 3 |
| GEO 130 | Gen. Physical Geography | 3 | PSY 281 | Abnormal Psychology | 3 |
| HIS 121 | Western Civilization I | 3 | SOC 210 | Intro. to Sociology | 3 |
| HIS 122 | Western Civilization II | 3 | SOC 213 | Sociology of the Family | 3 |
| HIS 131 | American History I | 3 | SOC 220 | Social Problems | 3 |
| HIS 132 | American History II | 3 | SOC 225 | Social Diversity | 3 |

D. Natural Sciences/Mathematics

7 SHC

1) Select one course, including the accompanying laboratory work, from among the following biological and physical science disciplines.
2) Select one course in introductory mathematics from the following list.

| BIO 111 | General Biology I | 4 | MAT 161 | College Algebra | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BIO 112 | General Biology II | 4 | MAT 162 | College Trigonometry | 3 |
| CHM 151 | College Physics I | 4 | MAT 175 | Precalculus | 4 |
| CHM 152 | General Chemistry II | 4 | MAT 263 | Brief Calculus | 3 |
| PHY 151 | College Physics I | 4 | MAT 271 | Calculus I | 4 |
| PHY 152 | College Physics II | 4 | MAT 272 | Calculus II | 4 |
| PHY 251 | General Physics I | 5 | MAT 273 | Calculus III | 4 |
| PHY 252 | General Physics II | 4 |  |  |  |

Other required hours(36-37 SHC)
A. Required:

ACA 111 College Student Success 1 SHC
Two Physical Education Courses

## 2-3 SHC

to be selected from the following:

| PED 110 | Fit \& Well for Life | 2 | PED 132 | Racquetball-Beginning | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PED 111 | Physical Fitness I | 1 | PED 133 | Racquetball-Intermediate | 1 |
| PED 113 | Aerobics I | 1 | PED 137 | Badminton | 1 |
| PED 114 | Aerobics II | 1 | PED 139 | Bowling-Beginning | 1 |
| PED 117 | Weight Training I | 1 | PED 142 | Lifetime Sports | 1 |
| PED 121 | Walk, Jog, Run | 1 | PED 143 | Volleyball-Beginning | 1 |
| PED 128 | Golf-Beginning | 1 | PED 144 | Volleyball-Intermediate | 1 |
| PED 129 | Golf-Intermediate | 1 | PED 145 | Basketball-Beginning | 1 |
| PED 130 | Tennis-Beginning | 1 | PED 146 | Basketball-Intermediate | 1 |
| PED 131 | Tennis-Intermediate | 1 |  |  |  |

B. Art Major Core Required

12 SHC
ART 114 Art History Survey I 3
ART 115 Art History Survey II 3
Art Elective Credits to be chosen from the following course list:
15 SHC
ART 122 Design II 3
ART 191 Selected Topics in Art 1
ART 193 Selected Topics in Art 3
ART 231 Printmaking I 3
ART 240 Painting I 3
ART 241 Painting II 3
ART 244 Watercolor
3
ART 281 Sculpture I 3
ART 282 Sculpture II 3
ART 283 Ceramics I 3
ART 284 Ceramics II 3
ART 288 Studio 3
C. General Electives $\quad 6$ SHC

These remaining credits can be chosen from other Art courses or from any other courses listed above that have not been taken for other requirements and which will satisfy the requirements of the senior institution to which the student plans to transfer.

One SHC in Co-Op can be chosen for career exploration.
Total Semester Hours Credit (SHC) in Program
64-65

# Associate in Science (A.S.) [A10400] Degree Requirements 

## General Education Core ( 44 SHC)

A. English/Communications ..... 6 SHCRequired:
ENG 111 Expository Writing ..... 3
Select one:
ENG 112 Argument Based Research ..... 3
ENG 113 Literature Based Research ..... 3ENG 114 Professional Research \& Reporting 3
B. Humanities/Fine Arts ..... 12 SHCSelect four courses from at least three of the following discipline areas:music, art, foreign languages, literature, philosophy and religion.At least one course must be literature course

| ART | 111 | Art Appreciation | 3 | MUS | 110 | Music Appreciation | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ART | 114 | Art History Survey I | 3 | PHI | 215 | Philosophical Issues | 3 |

ART 115 Art History Survey II 3 REL 110 World Religions ..... 33
ENG 131 Introduction to Literature 3 REL 211 Intro. to Old Testament
ENG 231 American Literature I 3 REL 212 Intro. to New Testament ..... 3
ENG 232 American Literature II 3 SPA 111 Elementary Spanish I ..... 3
ENG 233 Major American Writers 3 SPA 112 Elementary Spanish II ..... 3 ..... 3
ENG 241 British Literature I
ENG 241 British Literature I 3 SPA 211 Intermediate Spanish I 3 SPA 211 Intermediate Spanish I
ENG 242 British Literature II 3 SPA 212 Intermediate Spanish II ..... 3
ENG 251 Western World Literature I ..... 3
ENG 252 Western World Literature II ..... 3
FRE 111 Elementary French I ..... 3
FRE 112 Elementary French II ..... 3
FRE 211 Intermediate French I ..... 3
FRE 212 Intermediate French II ..... 3

## C. Social/Behavioral Sciences

Select four courses from at least three of the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology. At least one course must be a history course.

| ANT | 210 | General Anthropology | 3 | POL | 120 | American Government | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ECO | 251 | Prin. of Microeconomics | 3 | POL | 210 | Comparitive Government | 3 |
| ECO | 252 | Prin. of Macroeconomics | 3 | POL | 220 | International Relations | 3 |
| GEO | 111 | World Regional Geography | 3 | PSY | 150 | General Psychology | 3 |
| GEO | 113 | Economic Geography | 3 | PSY | 241 | Developmental Psychology | 3 |
| GEO | 130 | General Physical Geography | 3 | PSY | 281 | Abnormal Psychology | 3 |
| HIS | 121 | Western Civilization I | 3 | SOC | 210 | Introduction to Sociology | 3 |
| HIS | 122 | Western Civilization II | 3 | SOC | 213 | Sociology of the Family | 3 |
| HIS | 131 | American History I | 3 | SOC | 220 | Social Problems | 3 |
| HIS | 132 | American History II | 3 | SOC | 225 | Social Diversity | 3 |

D. Natural Sciences/Mathematics

14 SHC
Natural Sciences ( 8 SHC): Select two courses, including accompaning laboratory work, from among the biological and physical science disciplines.
Mathematics ( 6 SHC ): Select at least one course in introductory mathematics (college algebra, trigonometry, calculus, etc.); the other unit may be selected from among other quantitative subjects, such as computer science and statistics.

| BIO | 111 | General Biology I | 4 | MAT 263 | Brief Calculus | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 112 | General Biology II | 4 | MAT 271 | Calculus I | 4 |
| CIS | 115 | Intro to Prog \& Logic | 3 | MAT 272 | Calculus II | 4 |
| CHM | 151 | General Chemistry I | 4 | MAT 273 | Calculus III | 4 |
| CHM | 152 | General Chemistry II | 4 | MAT 285 | Differential Equations | 3 |
| MAT | 140 | Survey of Mathematics | 3 | PHY 151 | College Physics I | 4 |
| MAT | 151 | Statistics I | 3 | PHY 152 | College Physics II | 4 |
| MAT | 161 | College Algebra | 3 | PHY 251 | General Physics I | 5 |
| MAT | 162 | College Trigonometry | 3 | PHY 252 | General Physics II | 4 |
| MAT | 175 | Precalculus | 4 |  |  |  |

Other required hours ( $\mathbf{2 0 - 2 1} \mathbf{~ S H C}$ )
A. Required:

ACA 111 College Student Success
Two Physical Education Courses to be selected from the following:

| PED | 110 | Fit \& Well for Life |
| :--- | :--- | :--- |
| PED | 111 | Physical Fitness I |
| PED | 113 | Aerobics I |
| PED | 114 | Aerobics II |
| PED | 117 | Weight Training I |
| PED | 121 | Walk, Jog, Run |
| PED | 128 | Golf - Beginning |
| PED | 129 | Golf - Intermediate |
| PED | 130 | Tennis - Beginning |
| PED | 131 | Tennis - Intermediate |


| 2 | PED | 132 | Racquetball - Beginning |
| :--- | :--- | :--- | :--- | 11

## B. Other Required Hours

17-18 SHC
Courses must include a minimum of 14 additional SHC in mathematics and/or science selected from the courses listed above as Natural Sciences/Mathematics that have not already been used to satisfy the Core requirements. Additional hours needed to graduate can be chosen from the Humanities/Fine Arts, Social/Behavioral Sciences, and Natural Sciences/ Mathematics course lists above according to the student's proposed major and the require ments of the senior institution to which the student intends to transfer. One SHC in Co-Op can be chosen for career exploration.

# General Occupational Technology [D55280] <br> Difloma Program 

## Curriculum Description

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade their skills and to earn an associate degree by taking courses suited for their occupational interests and/or needs.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be selected from associate degree level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry level employment opportunities.
I. General Education Core (6 SHC)

Select 6 SHC from the following courses:

ART 111 Art Appreciation
ENG 102 Applied Communications I
or ENG 111 Expository Writing
ENG 112 Argument-Based Research
or ENG 113 Literature-Based Research
ENG 114 Professional Research \& Reporting
ENG 115 Oral Communication
(3) MAT 110 Mathematic Measurement or MAT 140 Survey of Mathematics
(3) or MAT 121 Algebra/Trigonometry I or MAT 161 College Algebra
(3) MUS 110 Music Appreciation
(3) PHI 215 Philosophical Issues
(3) PSY 118 Interpersonal Psychology

REL 110 World Religions
SOC 225 Social Diversity

## II. Major Area ( $\mathbf{3 0} \mathbf{~ S H C )}$

Select 30 SHC from the following courses:

| ACC | 120 Prin of Accounting I |
| :--- | :--- |
| BIO | 111 General Biology I |
| BIO | 168 Anatomy \& Physiology I |
| BIO | 169 Anatomy \& Physiology II |
| BIO | 170 Introductory Microbiology |
| BUS | 110 Introduction to Business |
| BUS | 121 Business Math |
| BUS | 230 Small Business Management |
| BUS | 253 Leadership and Mgt Skills |
| CHM | 130 General, Organic, \& Biochemistry |
| CIS | 110 Introduction to Computers |
| CIS | 115 Intro to Programming \& Logic |
| CIS | 120 Spreadsheet I |
| DFT | 111 Technical Drafting I |
| DFT | 119 Basic CAD |
| ECO | 251 Principles of Microeconomics |
| ECO | 252 Principles of Macroeconomics |
| HYD | 110 Hydraulics/Pneumatics I |
| MAT | 122 Algebra/Trigonometry II |
| MAT | 162 College Trigonometry |

(4) MEC 110 Intro to CAD/CAM
(4) MEC 180 Engineering Materials
(4) OMT 155 Meeting \& Present Skills (3)
(4) OST 131 Keyboarding
(4) OST 136 Word Processing
(3) PHY 131 Physics/Mechanics (4)
(3) PHY 151 College Physics I (4)
(3) PHY 152 College Physics II (4)
(3) POL 120 American Government (3)
(3) POL 130 State \& Local Government (3)
(3) PSY 150 General Psychology (3)
(3) PSY 241 Developmental Psychology (3)
(3) PSY 255 Intro to Exceptionality
(4) PSY 265 Behavioral Modifications (3)
(2) PSY 281 Abnormal Psychology (3)
(3) SOC 213 Sociology of the Family (3)
(3) SOC 210 Introduction to Sociology (3)
(3) SOC 220 Social Problems (3)
(3)
(3)
III. Electives (3 SHC)

Electives hours can be chosen from any other college level courses in the college catalog.

## Cooperative Education Courses

to be used in degree programs where COE credits are allowed

| COE | 110 | World of Work | 1 |
| :--- | :--- | :--- | :--- |
| COE | 111 | Co-Op Work Experience I | 1 |
| COE | 112 | Co-Op Work Experience I | 2 |
| COE | 121 | Co-Op Work Experience II | 1 |
| COE | 122 | Co-Op Work Experience II | 2 |
| COE | 131 | Co-Op Work Experience III | 1 |
| COE | 132 | Co-Op Work Experience III | 2 |

## Developmental Education Courses

| ENG | 080 | Writing Foundation | 4 |
| :--- | :--- | :--- | ---: |
| ENG | 090 | Composition Strategies | 3 |
| MAT | 060 | Essential Mathematics | 4 |
| MAT | 070 | Introductory Algebra | 4 |
| MAT | 080 | Intermediate Algebra | 4 |
| OST | 080 | Keyboarding Literacy | 2 |
| RED | 080 | Introduction to College Reading 4 |  |
| RED | 090 | Improved College Reading | 4 |

# Associate in Applied Science (A.A.S.) Degree Requirements 

Humanities/Fine Arts Courses

| ART | 111 | Art Appreciation | 3 |
| :--- | :--- | :--- | :--- |
| ART | 114 | Art History Survey I | 3 |
| ART | 115 | Art History Survey II | 3 |
| ENG | 125 | Creative Writing I | 3 |
| ENG | 131 | Introduction to Literature | 3 |
| ENG | 231 | American Literature I | 3 |
| ENG | 232 | American Literature II | 3 |
| ENG | 233 | Major American Writers | 3 |
| ENG | 241 | British Literature I | 3 |
| ENG | 242 | British Literature II | 3 |
| ENG | 251 | Western World Literature I | 3 |
| ENG | 252 | Western World Literature II | 3 |
| FRE | 111 | Elementary French I | 3 |
| FRE | 112 | Elementary French II | 3 |
| FRE | 211 | Intermediate French I | 3 |
| FRE | 212 | Intermediate French II | 3 |
| MUS | 110 | Music Appreciation | 3 |
| PHI | 215 | Philosophical Issues | 3 |
| REL | 110 | World Religions | 3 |
| REL | 211 | Introduction to Old Testament | 3 |
| REL | 212 | Introduction to New Testament | 3 |
| SPA | 111 | Elementary Spanish I | 3 |
| SPA | 112 | Elementary Spanish II | 3 |
| SPA | 211 | Intermediate Spanish I | 3 |
| SPA | 212 | Intermediate Spanish II | 3 |

## Social/Behavioral Science Courses

| ANT | 210 | General Anthropology | 3 | POL | 120 | American Government | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ECO | 251 | Principles of Microeconomics | 3 | POL | 130 | State \& Local Government | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | POL | 210 Comparative Government | 3 |  |
| GEO | 111 | World Regional Geography | 3 | POL | 220 International Relations | 3 |  |
| GEO | 113 | Economic Geography | 3 | PSY | 118 Interpersonal Psychology | 3 |  |
| GEO | 130 | General Physical Geography | 3 | PSY | 150 General Psychology | 3 |  |
| HIS | 121 | Western Civilization I | 3 | PSY | 241 Developmental Psychology | 3 |  |
| HIS | 122 | Western Civilization II | 3 | PSY | 246 Adolescent Psychology | 3 |  |
| HIS | 131 | American History I | 3 | PSY | 263 Educational Psychology | 3 |  |
| HIS | 132 | American History II | 3 | PSY | 281 Abnormal Psychology | 3 |  |
| HIS | 193 | Selected topics in History | 3 | SOC | 210 Introduction to Sociology | 3 |  |
| HIS | 215 | Nineteenth-Century Europe | 3 | SOC | 213 | Sociology of the Family | 3 |
| HIS | 216 | Twentieth-Century Europe | 3 | SOC | 220 | Social Problems | 3 |
| HIS | 226 | The Civil War | 3 | SOC | 225 | Social Diversity | 3 |
| HIS | 231 | Recent American History | 3 |  |  |  |  |
| HIS | 293 | Selected Topics in History | 3 |  |  |  |  |

## Accounting [A25100] <br> A.A.S. Degree

## Curriculum Description:

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

## Course and Hour Requirements

| Title |  |  | Credit | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3) | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3 | $0)$ |
| ENG | 115 | Oral Communication | 3 | (3 | $0)$ |
| ECO | 252 | Principles of Macroeconomics | 3 | (3 | $0)$ |
| MAT | 140 | Survey of Mathematics | 3 | (3 | $0)$ |
|  | - | Humanities/Fine Arts Elective | $\underline{3}$ | (3) | 0) |
|  |  | Total General Education Required Hours | 18 | (18 | 0) |
| Major Required Courses |  |  |  |  |  |
| ACC | 120 | Principles of Accounting I | 4 | (3 | 2) |
| ACC | 121 | Principles of Accounting II | 4 | (3 | 2) |
| ACC | 131 | Federal Income Taxes | 3 | (2 | 2) |
| ACC | 140 | Payroll Accounting | 2 | (1 | 2) |
| ACC | 149 | Introduction to Accounting Spreadsheets | 3 | (3) | $0)$ |
| ACC | 150 | Computerized General Ledger | 2 | (1 | 2) |
| ACC | 151 | Accounting Spreadsheet Applications | 2 | (1 | 2) |
| ACC | 220 | Intermediate Accounting I | 4 | (3 | 2) |
| ACC | 221 | Intermediate Accounting II | 4 | (3 | 2) |
| ACC | 225 | Cost Accounting | 3 | (3 | $0)$ |
| ACC | 227 | Practices in Accounting | 3 | (3 | $0)$ |
| ACC | 240 | Gov/Not-for-Profit Accounting | 3 | (3 | $0)$ |
| BUS | 110 | Introduction to Business | 3 | (3 | $0)$ |
| BUS | 115 | Business Law I | 3 | (3 | $0)$ |
| BUS | 121 | Business Math | 3 | (2 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| ECO | 251 | Principles of Microeconomics | 3 | (3 | $0)$ |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
|  | - | Major Elective * | $\underline{3}$ | (3) | 0) |
|  |  | Total Major Required Hours | 56 | (46 | 20) |

*Approved Major Electives

| ACC | 226 | Payroll Accounting (2) |
| :--- | :--- | :--- |
| ACC | 250 | Advanced Accounting (3) |
| ACC | 269 | Auditing (3) |
| BUS | 116 | Business Law II (3) |
| BUS | 135 | Principles of Supervision (3) |
| BUS | 137 | Principles of Management (3) |
| BUS | 235 | Performance Management (3) |
| CIS | 115 | Intro to Prog \& Logic (3) |
| CIS | 152 | Database Concepts \& Apps (3) |
| COE | - | Cooperative Education (1-3) |
| MKT | 120 | Principles of Marketing (3) |

## Total Semester Credit Hours in Program 74 SHC

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Accounting

## Certificate Program

|  | Title | Credit | (Class | Lab) |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ACC | 120 | Principles of Accounting I | $\mathbf{4}$ | $(3$ | $2)$ |
| ACC | 121 | Principles of Accounting II | $\mathbf{4}$ | $(3$ | $2)$ |
| ACC | 140 | Payroll Accounting | $\mathbf{2}$ | $(1$ | $2)$ |
| ACC | 149 | Introduction to Accounting Spreadsheet | $\mathbf{3}$ | $(3$ | $0)$ |
| ACC | 150 | Computerized General Ledger | $\mathbf{2}$ | $(1$ | $2)$ |
| ACC | 151 | Accounting Spreadsheet Applications | $\underline{\mathbf{2}}$ | $\underline{(1}$ | $\underline{2)}$ |
|  |  | Total Semester Hours in Certificate | $\mathbf{1 7}$ | $(\mathbf{1 2}$ | $\mathbf{1 0})$ |

# Associate Degree Nursing [A45120] <br> A.A.S. Degree 

## Curriculum Description:

The Associate Degree Nursing (non-integrated) curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as provider of nursing care, as manager of care, as member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physician's offices, industry, and community agencies.

## Course and Hour Requirements

|  |  | Title | Credit | Hours (Class | Lab | Clinical) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |  |  |  |
| BIO | 170 | Introductory Microbiology | 4 | (3 | 3 | $0)$ |
| ENG | 111 | Expository Writing | 3 | (3 | 0 | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3 | 0 | $0)$ |
| PSY | 150 | Introduction to Psychology | 3 | (3 | 0 | $0)$ |
| - | - | Humanities/Fine Arts Elective | $\underline{3}$ | $\underline{3}$ | $\underline{0}$ | 0) |
|  | Total | General Education Semester Hours | 16 | (15 | 3 | 0) |
| Major Required Courses |  |  |  |  |  |  |
| NUR | 115 | Fundamentals of Nursing | 5 | (2 | 3 | 6) |
| NUR | 116 | Nursing of Older Adults | 4 | (2) | 3 | 3) |
| NUR | 117 | Pharmacology | 2 | (1 | 3 | $0)$ |
| NUR | 125 | Maternal/Child Nursing | 8 | (5 | 3 | 6) |
| NUR | 133 | Nursing Assessment | 3 | (2 | 3 | $0)$ |
| NUR | 135 | Adult Nursing I | 9 | (5 | 3 | 9) |
| NUR | 185 | Mental Health Nursing | 5 | (3 | 0 | 6) |
| NUR | 235 | Adult Nursing II | 10 | (4 |  | 15) |
| BIO | 168 | Anatomy \& Physiology I | 4 | (3 | 3 | $0)$ |
| BIO | 169 | Anatomy \& Physiology II | 4 | (3 | 3 | $0)$ |
| PSY | 241 | Developmental Psychology | 3 | (3) | 0 | $0)$ |
| PSY | 281 | Abnormal Psycology | 3 | (3) | $\underline{0}$ | 0) |
| Total Major Semester Hours |  |  | 60 | (36 | 27 | 45) |

Total Semester Hours Credit Required for Program ..... 76

# Air Conditioning, Heating \& Refrigeration [D35100] Diploma Program 

## Curriculum Description:

The Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. A.A.S. degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems.

## Course and Hour Requirements

| Title |  |  | Hours |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Credits | Class | Lab |
| General Education Required Courses |  |  |  |  |  |
| ENG | 102 | Applied Communications II | 3 | (3 | $0)$ |
| MAT | 110 | Mathematical Measurement | 3 | (2) | 2) |
|  | Tota | General Education Required Hours | 6 | (5 | 2) |
| Major Required Courses |  |  |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
| AHR | 110 | Introduction to Refrigeration | 5 | (2 | 6) |
| AHR | 111 | HVACR Electricity | 3 | (2 | 2) |
| AHR | 112 | Heating Technology | 4 | (2 | 4) |
| AHR | 113 | Comfort Cooling | 4 | (2 | 4) |
| AHR | 114 | Heat Pump Technology | 4 | (2 | 4) |
| AHR | 133 | HVAC Servicing | 4 | (2 | 6) |
| AHR | 180 | HVACR Customer Relations | 1 | (1 | $0)$ |
| AHR | 210 | Residential Building Code | 2 | (1) | 2) |
| AHR | 211 | Residential System Design | 3 | (2 | 2) |
| BPR | 130 | Blueprint Reading/Const. | 2 | (1 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| WLD | 112 | Basic Welding Processes | 2 | 1 | 3) |
| Total Major Required Hours |  |  | 38 | (21 | 37) |
| Total | Requi | ed Semester Credit Hours in Program | 44 |  |  |

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Certificate Options

## Air Conditioning, Heating, And Refrigeration Technology

|  |  | Title | Credit | Class | Lab |
| :--- | :--- | :--- | :---: | :--- | :--- |
| AHR | 110 | Introduction to Refrigeration | $\mathbf{5}$ | $(2$ | $6)$ |
| AHR | 111 | HVACR Electricity | $\mathbf{3}$ | $(2$ | $2)$ |
| AHR | 113 | Comfort Cooling | $\mathbf{4}$ | $(2$ | $4)$ |
| AHR | 114 | Heat Pump Technology | $\mathbf{4}$ | $(2$ | $4)$ |
| AHR | 180 | HVACR Customer Relations | $\underline{\mathbf{1}}$ | $\underline{(1}$ | $\underline{0)}$ |
|  | Total Semester Hours Required for Certificate | $\mathbf{1 7}$ | $\mathbf{( 9}$ | $\mathbf{1 6})$ |  |

## Air Conditioning and Heating Design

| AHR | 110 | Introduction to Refrigeration | $\mathbf{5}$ | $(2$ | $6)$ |
| :--- | :--- | :--- | :--- | ---: | ---: |
| AHR | 111 | HVACR Electricity | $\mathbf{3}$ | $(2$ | $2)$ |
| AHR | 210 | Residential Building Code | $\mathbf{2}$ | $(1$ | $2)$ |
| AHR | 211 | Residential System Design | $\underline{3}$ | $\underline{(2}$ | $\underline{2)}$ |
|  | Total Semester Hours Required for Certificate | $\mathbf{1 3}$ | $\mathbf{( 7}$ | $\mathbf{1 2})$ |  |

## Refrigeration and Heating Servicing

| AHR | 110 | Introduction to Refrigeration | $\mathbf{5}$ | $(2$ | $6)$ |
| :--- | :--- | :--- | ---: | :--- | :--- |
| AHR | 111 | HVACR Electricity | $\mathbf{3}$ | $(2$ | $2)$ |
| AHR | 112 | Heating Technology | $\mathbf{4}$ | $(2$ | $4)$ |
| AHR | 133 | HVAC Servicing | $\underline{4}$ | $\underline{(2}$ | $\underline{6})$ |
|  | Total Semester Hours Required Certificate | $\mathbf{1 6}$ | $\mathbf{( 8}$ | $\mathbf{1 8})$ |  |

# Basic Law Enforcement Training [C55120] Certificate Program 

## Curriculum Description:

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State-commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

## Course and Hour Requirements

|  | Hours |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
| Title |  | Credits | Class | Lab | Clin


| Subject: | Contact Hours |
| :--- | ---: |
| Reading Test and Orientation | 4 |
| Constitutional Law | 4 |
| Laws of Arrest, Search, \& Seizure | 24 |
| Arrest Procedures | 8 |
| Law Enforcement Communications 4 |  |
| Physical Fitness | 51 |
| Mechanics of Arrest: Vehicle Stops16 |  |
| Elements of Criminal Law | 24 |
| Firearms | 48 |
| ABC Law | 4 |
| First Responder | 41 |
| Juvenile Law | 8 |
| Patrol Techniques | 20 |
| Defense Tactics | 32 |
| Crime Prevention | 4 |
| Processing the Arrestee | 4 |
| Report Writing | 12 |


| Subject: | Contact Hours |
| :--- | ---: |
| Controlled Substance | 8 |
| Special Populations | 12 |
| Custody Procedures | 2 |
| Dealing with Victims and Public | 8 |
| Interviews | 8 |
| Hazardous Materials | 12 |
| Crisis Management | 20 |
| Motor Vehicle Law | 20 |
| Civil Disorders | 8 |
| Testifying in Court | 12 |
| Criminal Investigation | 31 |
| Driver Training | 44 |
| Civil Process | 25 |
| Traffic Accident | 24 |
| Techniques of Traffic Enforcement | 8 |
| Supplemental Custody | 10 |
| Testing - Reviewing | 16 |

Total Contact Hours 576

[^0]CJC 121 Law Enforcement Operations 3

CJC 131 Criminal Law 3
CJC 132 Procedure and Evidence 3
CJC 221 Investigative Principles 4

## Business Administration [A25120]

A.A. S. Degree

## Curriculum Description:

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

## Course and Hour Requirements

| Title |  |  | Credits | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3) | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3 | $0)$ |
| ENG | 115 | Oral Communication | 3 | (3 | $0)$ |
| MAT | 140 | Survey of Mathematics | 3 | (3 | 0 ) |
| PSY | 118 | Interpersonal Psychology | 3 | (3 | $0)$ |
|  | - | Humanities/Fine Arts Elective | 3 | (3) | 0) |
|  |  | Total General Education Hours | 18 | (18 | 0) |
| Major Required Courses |  |  |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
| ACC | 120 | Principles of Accounting I | 4 | (3 | 2) |
| ACC | 121 | Principles of Accounting II | 4 | (3 | 2) |
| BUS | 110 | Introduction to Business | 3 | (3 | $0)$ |
| BUS | 115 | Business Law I | 3 | (3 | $0)$ |
| BUS | 116 | Business Law II | 3 | (3 | $0)$ |
| BUS | 121 | Business Math | 3 | (2 | 2) |
| BUS | 137 | Principles of Management | 3 | (3 | $0)$ |
| BUS | 153 | Human Resource Management | 3 | (3) | $0)$ |
| BUS | 225 | Business Finance | 3 | (2 | 2) |
| BUS | 239 | Business Application Seminar | 2 | (1 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| CIS | 120 | Spreadsheet I | 3 | (2 | 2) |
| ECO | 251 | Principles of Microeconimics | 3 | (3 | $0)$ |
| MKT | 120 | Principles of Marketing | 3 | (3 | $0)$ |
| ECO | 252 | Principles of Macroeconomics | 3 | (3 | $0)$ |
|  | - | Major Electives* | 9 | $\underline{(9)}$ | 0) |
|  |  | Total Major Semester Hours | 56 | (49 | 14) |


| *Approved Major Electives |  |  |
| :--- | :--- | :--- |
| ACC | 140 | Payroll Accounting (2) |
| ACC | 150 | Computerized Gen Ledger (2) |
| BUS | 135 | Principles of Supervision (3) |
| BUS | 147 | Business Insurance (3) |
| BUS | 252 | Labor Relations (3) |

CIS 115 Intro to Prog \& Logic (3)
COE - Cooperative Education (1-3)
MKT 121 Retailing (3)
MKT 123 Fundamentals of Selling (3)
OMT 110 Intro to Operations Management (3)

## Total Semester Credit Hours in Program

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Business Administration -

## Operations Management Technology [A2512G]

 A.A.S.Degree
## Curriculum Description:

Operations Management is a concentration under the curriculum title of Business Administration. This curriculum is designed to educate individuals in the technical and managerial aspects of operations for manufacturing and service industries.

Emphasized are analytical reasoning, problem solving, and continuous improvement concepts required in today's dynamic business and industry environments. Concepts include quality, productivity, organizational effectiveness, financial analysis, and the management of human, physical, and information resources.

Graduates should qualify for leadership positions or enhance their professional skills in supervision, team leadership, operations planning, quality assurance, manufacturing and service management, logistics/distribution, health and safety, human resources management, and inventory/materials management.

## Course and Hour Requirements

|  |  | Course |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Title |  |  | Credit | $\begin{aligned} & \text { Hours } \\ & \text { Class } \end{aligned}$ | Lab |
| Gener | al Ed | cation Required Courses |  |  |  |
| ECO | 251 | Principles of Microeconomics | 3 | (3 | $0)$ |
| ENG | 111 | Expository Writing | 3 | (3 | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3 | 0) |
| MAT | 140 | Survey of Mathematics | 3 | (3 | $0)$ |
|  | - | Humanities/Fine Arts Elective | 3 | (3) | 0) |
|  | Tota | General Education Required Hours | 15 | (15 | $0)$ |
| Major | Req | red Courses |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
| ACC | 120 | Principles of Accounting I | 4 | (3 | 2) |
| ACC | 121 | Principles of Accounting II | 4 | (3 | 2) |
| BUS | 110 | Introduction to Business | 3 | (3 | 0 ) |
| BUS | 115 | Business Law I | 3 | (3) | $0)$ |
| BUS | 121 | Business Math | 3 | (2 | 2) |
| BUS | 135 | Principles of Supervision | 3 | (3 | 0 ) |
| BUS | 137 | Principles of Management | 3 | (3 | $0)$ |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| CIS | 120 | Spreadsheet I | 3 | (2 | 2) |
| ECO | 252 | Principles of Macroeconomics | 3 | (3 | $0)$ |
| ISC | 121 | Environmental Health \& Safety | 3 | (3 | $0)$ |
| ISC | 131 | Quality Management | 3 | (3 | $0)$ |
| ISC | 210 | Production \& Operations Planning | 3 | (3 | $0)$ |
| MKT | 120 | Principles of Marketing | 3 | (3 | $0)$ |
| OMT | 110 | Intro. to Operations Management | 3 | (3 | $0)$ |
| OMT | 112 | Material Management | 3 | (3 | $0)$ |
| OMT | 143 | Just-In-Time | 2 | (2 | $0)$ |
| OMT | 260 | Issues in Operations Management | 3 | (3 | $0)$ |
|  | - | Electives* | $\underline{3}$ | (3) | 0) |
|  | Tota | Major Required Hours | 59 | (54 | 10) |

## *Approved Major Electives:

ACC 140 Payroll Accounting (2)
ACC 150 Computerized General Ledger (2)
BUS 252 Labor Relations (3)
BUS 153 Human Resource Management (3)
BUS 231 Computerized Inventory (3)
MKT 125 Buying and Merchandising (3)
Total Semester Credit Hours in Program
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

# Criminal Justice Technology [A55180] <br> A.A.S. Degree 

## Curriculum Description:

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Course and Hour Requirements

|  |  | Title | Credit | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gener | Ed | cation Required Courses |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3 | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3 | $0)$ |
| ENG | 115 | Oral Communication | 3 | (3 | $0)$ |
| MAT | 140 | Survey of Mathematics | 3 | (3 | $0)$ |
| POL | 130 | State and Local Government | 3 | (3 | $0)$ |
|  | - | Humanities/Fine Arts Elective | 3 | (3) | 0) |
|  | Total | General Education Required Hours | 18 | (18 | $0)$ |
| Major | Requ | ired Courses |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | 0 ) |
| CIS | 110 | Introduction to Computers | 3 | (3 | $0)$ |
| CJC | 111 | Introduction to Criminal Justice | 3 | (3 | $0)$ |
| CJC | 112 | Criminology | 3 | (3 | $0)$ |
| CJC | 113 | Juvenile Justice | 3 | (3 | $0)$ |
| CJC | 121 | Law Enforcement Operations** | 3 | (3 | $0)$ |
| CJC | 131 | Criminal Law** | 3 | (3 | $0)$ |
| CJC | 132 | Procedure and Evidence** | 3 | (3 | 0 ) |
| CJC | 141 | Corrections | 3 | (3 | $0)$ |
| CJC | 211 | Counseling | 3 | (3 | 0 ) |
| CJC | 212 | Ethics and Community Relations | 3 | (3 | 0 ) |
| CJC | 215 | Organization \& Administration | 3 | (3 | 0 ) |
| CJC | 221 | Investigative Principles** | 4 | (3) | 2) |
| CJC | 222 | Criminalistics | 3 | (3 | $0)$ |
| CJC | 225 | Crisis Intervention | 3 | (3 | $0)$ |
| CJC | 231 | Constitutional Law | 3 | (3 | $0)$ |
| HEA | 112 | First Aid and CPR | 2 | (1 | 2) |
| PSY | 150 | General Psychology | 3 | (3 | $0)$ |
| SOC | 210 | Introduction to Sociology | 3 | (3) | $0)$ |
| - | - | Major Elective* | $\underline{2}$ | (2) | 0) |
|  | Total | Major Required Hours | 57 | (55 | 4) |

\author{

* Approved Major Electives <br> SOC 220 Social Problems (3) <br> SOC 225 Social Diversity (3)
}

SPA 111 Elementary Spanish I (3)
COE - Cooperative Education (1-2)

# Total Semester Credit Hours in Program 

**Any student who has completed the Basic Law Enforcement Training Program (BLET) can receive 13 SHC in the Criminal Justice Program through the courses designated.

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not
required to have this hour of credit for graduation.

## Cosmetology <br> Diploma Program

## Curriculum Description:

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and as skin/nail specialists, platform artists, and related businesses.

## Course and Hour Requirements

|  |  | Title | Credits | Hours Class | Lab | Clinical |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Courses |  |  |  |  |  |  |
| ENG | 102 | Applied Communication II | 3 | (3 | 0 | $0)$ |
| MAT | 110 | Mathematical Measurement | $\underline{3}$ | $\underline{1}$ | $\underline{2}$ | $\underline{0}$ |
|  | Total | General Education Hours | 6 | (5 | 2 | $0)$ |
| Major Required Courses |  |  |  |  |  |  |
| COS | 111 | Cosmetology Concepts I | 4 | (4 | 0 | $0)$ |
| COS | 112 | Salon I | 8 | (0 | 0 | 24) |
| COS | 113 | Cosmetology Concepts II | 4 | (4 | 0 | $0)$ |
| COS | 114 | Salon II | 8 | (0) | 0 | 24) |
| COS | 115 | Cosmetology Concepts III | 4 | (4 | 0 | $0)$ |
| COS | 116 | Salon III | 4 | (0 | 0 | 12) |
| COS | 120 | Esthetics | 2 | (1 | 3 | 0) |
| COS | 123 | Advanced Haircoloring | 2 | (1 | 3 | $0)$ |
| COS | 124 | Trichology \& Chemistry | 2 | (1 | 3 | $0)$ |
| COS | 140 | Contemporary Design | 2 | (1 | 3 | $0)$ |
| COS | 160 | Design Applications | $\underline{2}$ | (1) | $\underline{3}$ | 0) |
|  | Total | Major Required Hours | 42 | (17 | 15 | 60) |
| Total Semester Credit Hours in Program 48 |  |  |  |  |  |  |

## Electrical/Electronics Technology [A35220] <br> A.A.S. Degree

## Curriculum Description:

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, Basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

Course and Hour Requirements

| Title |  |  | Credits | Hours <br> Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Courses |  |  |  |  |  |
| *ENG |  | Expository Writing | 3 | (3) | $0)$ |
| ENG | 114 | Professional Research \& Reporting | 3 | (3) | $0)$ |
| *MAT |  | Algebra/Trigonometry I | 3 | (2 | 2) |
| - | - | Humanities/Fine Arts Elective | 3 | (3) | $0)$ |
| - | - | Social/Behavioral Science Elective | 3 | (3) | 0) |
|  | Total | General Education Required Hours | 15 | (14 | 2) |
| Major Required Courses |  |  |  |  |  |
| * ACA | 111 | College Student Success | 1 | (1) | $0)$ |
| *ELC | 112 | DC/AC Electricity | 5 | (3) | $6)$ |
| *ELC | 113 | Basic Wiring I | 4 | (2 | 6) |
| ELC | 114 | Basic Wiring II | 4 | (2) | 6) |
| *ELC | 115 | Industrial Wiring | 4 | (2) | 6) |
| *ELC | 117 | Motors and Controls | 4 | (2 | 6) |
| *ELC | 119 | NEC Calculations | 2 | (1 | 2) |
| *ELC | 125 | Diagrams \& Schematics | 2 | (1) | 2) |
| *ELC | 126 | Electrical Computations | 3 | (2 | 2) |
| *ELC | 127 | Software for Technicians | 2 | (1) | 2) |
| *ELC | 128 | Introduction to PLC | 3 | (2 | 3) |
| ELC | 132 | Electrical Drawings | 2 | (1) | 2) |
| ELC | 215 | Electrical Maintenance | 3 | (2) | 3) |
| ELC | 228 | PLC Applications | 4 | (2 | 6) |
| ELC | 229 | Application Project | 2 | (1) | 3) |
| *ELN | 229 | Industrial Electronics | 4 | (2 | 4) |
| ELN | 131 | Electronic Devices | 4 | (3 | 3) |
| ELN | 133 | Digital Electronics | 4 | (3 | 3) |
| - | - | Major Elective | 3 | (3) | 0) |
| Total Major Required Hours |  |  | 60 | (36 | 65) |

Approved Electives:
ELC 118 National Electrical Code (2) ELN $152 \quad$ Fabrication Techniques (2)
ELC 121 Electrical Estimating (2)
ELC 131 DC/AC Circuit Analysis (5)
ELC 133 Adv Circuit Analysis (3)
HYD 110
Hydraulics/Pneumatics (3)
ISC 112 Industrial Safety (2)
COE - Cooperative Education (1-3)
ELN 135 Electronic Circuits (3)
Total Semester Credit Hours in Program
*Courses required for the diploma. Credit hours required for diploma - 40.
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

# Electrical/Electronics Technology Certificate Options 

Basic Wiring Certificate

| Title |  |  | Credit | Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ELC | 112 | DC/AC Electricity | 5 | (3) | 6) |
| ELC | 113 | Basic Wiring I | 4 | (2) | 6) |
| ELC | 114 | Basic Wiring II | 4 | (2 | 6) |
| ELC | 126 | Electrical Computations | 3 | (2) | 2) |
| Total Hours for Certificate |  |  | 16 | (9) | 20) |

## Industrial Wiring Certificate

| ELC | 112 | DC/AC Electricity | $\mathbf{5}$ | $(3$ | $6)$ |
| :--- | :--- | :--- | :--- | ---: | ---: |
| ELC | 115 | Industiral Wiring | $\mathbf{4}$ | $(2$ | $6)$ |
| ELC | 119 | NEC Calculations | $\mathbf{2}$ | $(1$ | $2)$ |
| ELC | 126 | Electrical Computations | $\underline{3}$ | $\underline{(2}$ | $\underline{2})$ |
|  | Total Hours for Certificate | $\mathbf{1 4}$ | $\mathbf{( 8}$ | $\mathbf{1 6})$ |  |

## Motor Certificate

| ELC | 112 | DC/AC Electricity | $\mathbf{5}$ | $(3$ | $6)$ |
| :--- | :--- | :--- | :--- | ---: | ---: |
| ELC | 117 | Motors and Controls | $\mathbf{4}$ | $(2$ | $6)$ |
| ELC | 126 | Electrical Computations | $\underline{3}$ | $\frac{(2}{2}$ | $\underline{2})$ |
|  | Total Hours for Certificate | $\mathbf{1 2}$ | $\mathbf{( 7}$ | $\mathbf{1 4})$ |  |

## PLC Certificate

| ELC | 126 | Electrical Computation | $\mathbf{3}$ | $(2$ | $2)$ |
| :--- | :--- | :--- | :--- | ---: | :--- |
| ELC | 127 | Software for Technicians | $\mathbf{2}$ | $(1$ | $2)$ |
| ELC | 128 | Introduction to PLC | $\mathbf{3}$ | $(2$ | $3)$ |
| ELC | 228 | PLC Application | $\underline{4}$ | $\underline{(2}$ | $\underline{6})$ |
|  | Total Hours for Certificate | $\mathbf{1 2}$ | $\mathbf{( 7}$ | $\mathbf{1 3})$ |  |

## Electronics Engineering Technology [A40200] A.A.S. Degree Program

## Curriculum Description:

The Electronic Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, fieldservice technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

## Course and Hour Requirements

| Title | Credits | Hours Class | Lab |
| :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |
| *ENG 111 Expository Writing | 3 | (3 | $0)$ |
| ENG 114 Professional Research \& Reporting | 3 | (3) | $0)$ |
| *MAT 121 Algebra/Trigonometry I | 3 | (2 | 2) |
| Humanities/Fine Arts Elective | 3 | (3 | $0)$ |
| Social/Behavioral Science Elective | 3 | (3) | 0) |
| Total General Education Required Hours | 15 | (14 | 2) |
| Major Courses |  |  |  |
| *ACA 111 College Student Success | 1 | (1 | $0)$ |
| ELC 131 DC/AC Circuit Analysis | 5 | (4 | 3) |
| *ELC 127 Software for Technicians | 2 | (1 | 2) |
| *ELC 128 Introduction to PLC | 3 | (2 | 3) |
| ELC 228 PLC Applications | 4 | (2 | $6)$ |
| *ELN 131 Electronic Devices | 4 | (3) | 3) |
| *ELN 132 Linear IC Applications | 4 | (3 | 3) |
| *ELN 133 Digital Electronics | 4 | (3) | 3) |
| *ELN 152 Fabrication Techniques | 2 | (1) | 3) |
| ELN 229 Industrial Electronics | 4 | (2 | 4) |
| ELN 231 Industrial Controls | 3 | (2 | 3) |
| *ELN 232 Introduction to Microprocessors | 4 | (3) | $3)$ |
| ELN 234 Communication Systems | 4 | (3) | 3) |
| ELN 236 Fiber Optics and Lasers | 4 | (3) | 2) |
| ELN 275 Troubleshooting | 2 | (1 | 2) |
| MAT 122 Algebra/Trigonometry II | 3 | (2 | 2) |
| PHY 131 Physics-Mechanics | 3 | (2 | 4) |
| * - Major Elective | 3-4 | (3) | 0) |
| Total Major Required Semester Hours | 59-60 | (41 | 49) |

*Approved Electives:
ELN 135 Electronic Circuits (3)
ELN 260 Prog. Logic Controllers (4)
ELC 135 Electrical Machines I (3)
HYD 110 Hydraulics/Pneumatics (3)
COE - Cooperative Education (1-3)

## Total Semester Credit Hours in Program <br> 75-76

* Courses required for the diploma. Credit hours required for diploma - 38

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

# Electronics Engineering Technology Certificate Options 

Programmable Logic Controller Certificate

| Title |  |  | Credit | Class | Lab |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ELC | 127 | Software for Technicians | $\mathbf{2}$ | $(1$ | $2)$ |
| ELC | 128 | Introduction to PLC | $\mathbf{3}$ | $(2$ | $3)$ |
| ELC | 131 | DC/AC Circuit Analysis | $\mathbf{5}$ | $(4$ | $3)$ |
| ELC | 228 | PLC Application | $\underline{4}$ | $\underline{(2}$ | $\underline{6)}$ |
|  |  | Total Hours for Certificate | $\mathbf{1 4}$ | $(\mathbf{9}$ | $\mathbf{1 4 )}$ |

Electronic Devices Certificate

| ELC | 127 | Software for Technicians | $\mathbf{2}$ | $(1$ | $2)$ |
| :--- | :--- | :--- | :--- | ---: | ---: |
| ELC | 131 | DC/AC Circuit Analysis | $\mathbf{5}$ | $(4$ | $3)$ |
| ELN | 131 | Electronic Devices | 4 | $(3$ | $3)$ |
| ELN | 132 | Linear IC Application | $\underline{4}$ | $\underline{(3}$ | $\underline{3)}$ |
|  |  | Total Hours for Certificate | $\mathbf{1 5}$ | $\mathbf{( 1 1}$ | $\mathbf{1 1 )}$ |

## Digital Microprocessors Certificate

| ELC | 127 | Software for Technicians | $\mathbf{2}$ | $(1$ | $2)$ |
| :--- | :--- | :--- | :--- | ---: | :--- |
| ELC | 131 | DC/AC Circuit Analysis | $\mathbf{5}$ | $(4$ | $3)$ |
| ELN | 133 | Digital Electronics | $\mathbf{4}$ | $(3$ | $3)$ |
| ELN | 232 | Intro to Microporcessors | $\underline{4}$ | $\underline{(3}$ | $\underline{3)}$ |
|  |  | Total Hours for Certificate | $\mathbf{1 5}$ | $\mathbf{( 1 1}$ | $\mathbf{1 1 )}$ |

## Communication Certificate

| ELC | 131 | DC/AC Circuit Analysis | $\mathbf{5}$ | $(4$ | $3)$ |
| :--- | :--- | :--- | :--- | ---: | ---: |
| ELN | 131 | Electronic Devices | $\mathbf{4}$ | $(3$ | $3)$ |
| ELN | 132 | Linear IC Application | $\mathbf{4}$ | $(3$ | $3)$ |
| ELN | 234 | Communication Systems | $\underline{4}$ | $\underline{(3}$ | $\underline{3})$ |
|  |  | Total Hours for Certificate | $\mathbf{1 7}$ | $\mathbf{( 1 3}$ | $\mathbf{1 2})$ |

# Human Services Technology [A45380] <br> A.A.S. Degree 

## Curriculum Description:

The Human Services Technology curriculum prepares students for entry-level positions in institutions and agencies which provide social, community, and educational services. Along with core courses, students take courses which prepare them for specialization in specific human service areas.

Students will take courses from a variety of disciplines. Emphasis in core courses is placed on development of relevant knowledge, skills, and attitudes in human services. Fieldwork experience will provide opportunities for application of knowledge and skills learned in the classroom.

Graduates should qualify for positions in mental health, child care, family services, social services, rehabilitiation, correction, and educational agencies. Graduates choosing to continue their education may select from a variety of transfer programs at senior public and private institutions.

Course and Hour Requirements

|  |  | Title | Credit | Hours Class | Lab | Clinical |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gener | al Edu | cation Required Courses |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3 | 0 | $0)$ |
| ENG | 114 | Pro. Research \& Reporting | 3 | (3 | 0 | $0)$ |
| BIO | 111 | General Biology I Or | 4 | (3 | 3 | $0)$ |
| MAT | 140 | Survey of Mathematics Or | [3 | (3 | 0 | 0 )] |
| MAT | 161 | College Algebra | [3 | (3 | 0 | 3)] |
| PSY | 241 | Developmental Psychology | 3 | (3 | 0 | $0)$ |
| - | - | Humanities/Fine Arts Elective | 3 | $\underline{1}$ | $\underline{0}$ | 0) |
|  | Total | General Education Required Hours | 15-16 | (15 | 3 | 0-3) |
| Major | Requ | ired Courses |  |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | 0 | $0)$ |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2 | $0)$ |
| DDT | 110 | Developmental Disabilities - | 3 | (3 | 0 | $0)$ |
| GRO | 120 | Gerontology | 3 | (3 | 0 | $0)$ |
| HSE | 110 | Intro. to Human Services | 3 | (2 | 2 | $0)$ |
| HSE | 112 | Group Process I | 2 | (1 | 2 | 0) |
| HSE | 123 | Interviewing Techniques | 3 | (2 | 2 | 0) |
| HSE | 125 | Counseling | 3 | (2 | 2 | $0)$ |
| HSE | 160 | HSE Clinical Supervision I | 1 | (1 | 0 | 0) |
| HSE | 163 | HSE Clinical Experience I | 3 | (0 | 0 | 9) |
| HSE | 210 | Human Services Issues | 2 | (2 | 0 | $0)$ |
| HSE | 212 | Group Process II | 2 | (1 | 2 | 0) |
| HSE | 215 | Health Care | 5 | (3 |  | 3) |
| HSE | 225 | Crisis Intervention | 3 | (3 | 0 | $0)$ |
| HSE | 260 | HSE Clinical Supervision II | 1 | (1) | 0 | $0)$ |
| HSE | 264 | HSE Clinical Experience II | 4 | (0 | 0 | 12) |
| PSY | 150 | General Psychology | 3 | (3 | 0 | 0) |
| PSY | 281 | Abnormal Psychology | 3 | (3 |  | $0)$ |
| SAB | 130 | Addictive Behaviors | 3 | (3 | 0 | 0) |
| SOC | 210 | Introduction to Sociology | 3 | (3 | 0 | 0) |
| SOC | 213 | Sociology of the Family | 3 | (3 | 0 | 0) |
| SOC | 220 | Social Problems | $\underline{3}$ | (3) | $\underline{0}$ | 0) |
|  | Total | Major Required Hours | 60 | $(45$ | 14 | 24) |
| Total | Semes | ter Credit Hours in Program |  |  |  | 75-76 |

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Industrial Maintenance Technology [A50240] A.A.S. Degree

## Curriculum Description:

The Industrial Maintenance Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related technical information to qualify for employment or advancement in the various areas of industrial maintenance technology.

Course and Hour Requirements

| Title |  |  |  | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Credit |  |  |
| General Education Courses |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3) | $0)$ |
| ENG | 114 | Professional Research and Reporting | 3 | (3) | $0)$ |
| MAT | 121 | Algebra/Trigonometry I | 3 | (2 | 2) |
| - | - | Humanities/Fine Arts Elective | 3 | (3 | $0)$ |
| - | - | Social/Behavioral Science Elective | 3 | (3) | $0)$ |
|  | Total General Education Required Hours |  | 15 | (14 | 2) |
| Major Required Courses |  |  |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
| AHR | 120 | HVACR Maintenance | 2 | (1 | 3) |
| BPR | 111 | Blueprint Reading | 2 | (1 | 2) |
| BPR | 121 | Blueprint Reading Mechanical | 2 | (1 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| DFT | 119 | Basic CAD | 2 | (1 | 2) |
| ELC | 128 | Intro to PLC | 3 | (2) | 3) |
| ELC | 131 | DC/AC Circuit Analysis | 5 | (4 | $3)$ |
| ELN | 231 | Industrial Controls | 3 | (2 | 3) |
| HYD | 110 | Hydraulics/Pneumatics | 3 | (2 | 3) |
| ISC | 112 | Industrial Safety | 2 | (2 | $0)$ |
| MAC | 121 | Intro to CNC | 2 | (2 | $0)$ |
| MEC | 111 | Machine Processes I | 3 | (2 | 3) |
| MEC | 112 | Machine Processes II | 3 | (2 | 3) |
| MEC | 160 | Mechanical Industrial Systems | 2 | (1 | 3) |
| MEC | 210 | Materials-Stress Analysis | 2 | (1 | 2) |
| MNT | 110 | Introduction to Maintenance Procedures | 2 | (1 | 3) |
| MNT | 111 | Maintenance Practices | 2 | (1 | 3) |
| MNT | 150 | Basic Building Maintenance | 2 | (1 | 3) |
| MNT | 220 | Rigging \& Moving | 2 | (1 | 3) |
| MNT | 230 | Pumps \& Piping Systems | 2 | (1 | 3) |
| WLD | 112 | Basic Welding Processes | 2 | (1 | 3) |
| - | - | *Elective | 3 | (3) | 0) |
|  |  | Total Major Required Hours | 55 | 36 | 52 |

*Co-Op Option: Qualified student may elect to take up to 3 credit hours of Cooperative Education as the 3 hours of elective credit.

Total Semester Credit Hours in Program
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

|  |  | Industrial Maintena <br> Certificate <br> Title |  | OLO <br> Hours <br> Class | $Y$ Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ELC | 128 | Intro. to PLC | 3 | (2 | 3) |
| ELC | 131 | DC/AC CircuitAnalysis | 5 | (4 | 3) |
| HYD | 110 | Hydraulics/Pneumatics | 3 | (2 | 3) |
| MEC | 111 | Machine Processes I | 3 | (2 | 3) |
| MNT | 110 | Introduction to Maintenance Procedures | 2 | (1 | 3) |
| WLD | 112 | Basic Welding Processes | $\underline{2}$ | (1) | 3) |
|  | Total | Hours In Curriculum For Certificate | 18 | (12 | 8) |

## Information Systems [A25260] <br> A.A.S. Degree

## Curriculum Description:

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

## Course and Hour Requirements


*Approved Electives:
Select 12 SHC from the Following:
ACC 140 Payroll Accounting $\quad 2 \quad\left(\begin{array}{lll}1 & 2\end{array}\right)$
ACC 225 Cost Accounting $\left.4 \mathbf{l}^{3} \quad 2\right)$
BUS 110 Introduction to Business 3 (3 0)
BUS 121 Business Math 3 (2 $\quad 3$ 2)
BUS 152 Human Relations 3 (3
ECO 251 Principles of Microeconomics 3 (3 0)
OST 134 Text Entry \& Formatting 4
COE - 1 to 3 credit hours [1 (0) 10)]
$\left[\begin{array}{lll}2 & (0 & 20)\end{array}\right]$
$\left[\begin{array}{lll}{[3} & (0 & 30)\end{array}\right]$
Total Semester Credit Hours in Program
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Information Systems - Programming [A2526E] <br> A.A.S. Degree

## Curriculum Description:

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

## Course and Hour Requirements

| Title |  |  |  | Credits $\begin{aligned} & \text { Hours } \\ & \text { Class Lab }\end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Courses |  |  |  |  |  |  |
| ENG | 111 | Expository Writing |  | 3 | (3) | $0)$ |
| ENG | 114 | Professional Resear | Reporting Or | 3 | (3 | $0)$ |
| ENG | 115 | Oral Communicatio |  | [3 | (3) | $0)$ ] |
| MAT | 161 | College Algebra |  | 3 | (3 | $0)$ |
| - | - | Humanities/Fine A | ctive | 3 | (3) | $0)$ |
| - | - | Social/ Behavioral | Elective | 3 | (3) | O) |
|  | Tota | General Education |  | 15 | (15 | 0) |
| Major Required Courses |  |  |  |  |  |  |
| ACA | 111 | College Student Su |  | 1 | (1 | $0)$ |
| ACC | 120 | Principles of Accou |  | 4 | (3 | 2) |
| CIS | 110 | Introduction to Con |  | 3 | (2 | 2) |
| CIS | 115 | Intro. to Programm | Logic | 3 | (2) | 2) |
| CIS | 120 | Spreadsheet I |  | 3 | (2 | 2) |
| CIS | 130 | Survey of Operatin | ems | 3 | (2 | 3) |
| CIS | 143 | Object Oriented Progr | ming | 3 | (2 | 3) |
| CIS | 147 | Operating Systems | dows | 3 | (2 | 2) |
| CIS | 152 | Database Concepts | plications | 3 | (2 | 2) |
| CSC | 132 | BASIC Programmi |  | 3 | (2 | 3) |
| CSC | 135 | COBOL Programm |  | 3 | (2 | 3) |
| CSC | 138 | RPG Programming |  | 3 | (2 | 3) |
| NET | 110 | Data Communicati | tworking | 3 | (2 | 2) |
| Advanced Programming:(Select two) |  |  |  | 6 | (4 | 6) |
| CSC | 232 | Advanced BASIC | 3 (2-3) |  |  |  |
| CSC | 235 | Advanced COBOL | 3 (2-3) |  |  |  |
| CSC | 238 | Advanced RPG | 3 (2-3) |  |  |  |
| Total Major Required Hours |  |  |  | 44 | (30) | 35) |

## Approved Electives:

Select 9 SHC from the Following:

| ACC | 121 | Principles of Accounting II | $\mathbf{4}$ | $(3$ | $2)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BUS | 110 | Introduction to Business | $\mathbf{3}$ | $(3$ | $0)$ |
| BUS | 151 | People Skills | $\mathbf{3}$ | $(3$ | $0)$ |
| BUS | 152 | Human Relations | $\mathbf{3}$ | $(3$ | $0)$ |
| CIS | 164 | DTP Layout and Design | $\mathbf{3}$ | $(2$ | $2)$ |
| ECO | 251 | Principles of Microeconomics | $\mathbf{3}$ | $(3$ | $0)$ |
| OST | 131 | Keyboarding | $\mathbf{2}$ | $(1$ | $2)$ |
| OST | 134 | Text Entry \& Formatting | $\mathbf{4}$ | $(3$ | $2)$ |
| OST | 136 | Word Processing | $\mathbf{2}$ | $(1$ | $2)$ |
| COE | - | 1 to 3 hours | $[\mathbf{1}$ | $(0$ | $10)]$ |
|  |  | $[2$ | $(0$ | $20)]$ |  |

Total Semester Credit Hours in Program ..... 68

Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

# Manufacturing Engineering Technology [A40300] <br> A.A.S. Degree 

## Curriculum Description:

The Manufacturing Engineering Technology curriculum prepares individuals for employment in the fields of manufacturing technology. The curriculum emphasizes the theory and training required to effectively augment manufacturing engineers in industry.

Courses include a background in mechanical and related theory and the use of manufacturing and analytical equipment. Industrial standards such as EPA, OSHA, GD \& T, and ISO are discussed. Computer usage for process control and effective communication skills is emphasized.

Graduates of this curriculum specification, tooling selection, automation programming, project facilitation, and supervision. Certification is available through organizations such as ASQC, SME, and NICET.

## Course and Hour Requirements

| Title |  |  | Credits | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Courses |  |  |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3 | $0)$ |
| ENG | 114 | Professional Research and Reporting | 3 | (3 | $0)$ |
| MAT | 161 | College Algebra | 3 | (3 | $0)$ |
| - | - | Humanities/Fine Arts Elective | 3 | (3 | $0)$ |
| - | - | Social/Behavioral Science Elective | 3 | (3) | 0) |
|  | Total | General Education Required Hours | 15 | (15 | 0) |
| Major Required Courses |  |  |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | $0)$ |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| DFT | 111 | Technical Drafting I | 4 | (2 | 6) |
| DFT | 121 | Introduction to GD \& T | 2 | (1 | 2) |
| DFT | 151 | CAD I | 3 | (2 | 3) |
| DFT | 152 | CAD II | 3 | (2 | 3) |
| ELC | 111 | Introduction to Electricity | 3 | (2 | 2) |
| HYD | 110 | Hydraulics/Pneumatics | 3 | (2 | 3) |
| ISC | 112 | Industrial Safety | 2 | (2 | $0)$ |
| ISC | 132 | Manufacturing Quality Control | 3 | (0 | 3) |
| MAT | 162 | College Trigonometry | 3 | (3 | $0)$ |
| MEC | 110 | Introduction to CAD/CAM | 2 | (1 | 2) |
| MEC | 111 | Machine Processes I | 3 | (2 | 3) |
| MEC | 161 | Manufacturing Processes I | 3 | (3 | $0)$ |
| MEC | 180 | Engineering Materials | 3 | (2 | 3) |
| MEC | 250 | Statics \& Strength of Materials | 5 | (4 | 3) |
| PHY | 151 | College Physics I | 4 | (3 | 2) |
| Total Major Required Hours |  |  | 6 | (6) | 0) |
|  |  |  | 56 | $(40$ | 37) |

*Approved Major Electives:

| CIS 120 | Spreadsheet I |
| :--- | :--- |
| CIS 152 | Database Concepts \& Apps |

CSC 132 BASIC Programming (3)
CSC 135 COBOL Programming (3)
CSC 138 RPG Programming
COE - Cooperative Education
DFT 112 Technical Drafting II
$\begin{array}{ll}\text { ELC } 112 & \text { DC/AC Electricity } \\ \text { ELN } 131 & \text { Electronic Devices }\end{array}$
(4)
(3)
(3) ISC 140 Material \& Capacity Plan (3)

ISC 141 Prod Activity Control (3)
ISC 221 Statistical Qual Control (3)
MAC 121 Intro to CNC (2)
MAC 122 CNC Turning (2)
MAC 124 CNC Milling (2)
WLD 111 Oxy-Fuel Welding (2)
WLD 112 Basic Welding Processes (2)
WLD 115 SMAW (Stick) Plate (5)

## Manufacturing Engineering Technology

## Certificate Program

|  |  | Title | Credit | Class | Lab |
| :--- | :--- | :--- | :---: | :--- | :--- |
| DFT | 111 | Technical Drafting I | $\mathbf{4}$ | $(2$ | $6)$ |
| DFT | 151 | CAD I | $\mathbf{3}$ | $(2$ | $3)$ |
| ELC | 111 | Introduction to Electricity | $\mathbf{3}$ | $(2$ | $2)$ |
| MEC | 110 | Introduction to CAD/CAM | $\mathbf{2}$ | $(1$ | $2)$ |
| MEC | 111 | Machine Processes I | $\mathbf{3}$ | $(2$ | $3)$ |
| MEC | 161 | Manufacturing Processes I | $\underline{\mathbf{3}}$ | $\underline{(3}$ | $\underline{0})$ |
|  | Total Hours in Curriculum for Certificate | $\mathbf{1 8}$ | $(12$ | $\mathbf{1 6})$ |  |

# Mechanical Drafting Technology [A50340] <br> A.A.S. Degree 

## Curriculum Description:

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences as they relate to the design process are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates should qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

## Course and Hour Requirements

|  | Title |  |  | Hours |
| :--- | :--- | :--- | :--- | :--- |
| General |  |  |  |  |
| Education Courses |  |  |  |  |
| ENG | 111 | Expository Writing |  |  |
| ENG | 114 | Professional Research and Reporting | Class | Lab |
| MAT | 121 | Algebra/Trigonometry I | $\mathbf{3}$ | $(3$ |$\left.) 0\right)$


| CIS 120 | Spreadsheet I | (3) |
| :--- | :--- | :--- |
| CIS 152 | Database Concepts \& Apps | (3) |
| CSC 132 | BASIC Programming | (3) |
| CSC 135 | COBOL Programming | (3) |
| CSC 138 | RPG Programming | (3) |
| COE - | Cooperative Education | $(1-6)$ |


| ISC 140 | Material \& Capacity Plan (3) |  |
| :--- | :--- | :--- |
| ISC 141 | Prod Activity Control | (3) |
| ISC 221 | Statistical Qual Control | (3) |
| WLD 111 | Oxy-Fuel Welding | (2) |
| WLD 112 | Basic Welding Processes (2) |  |
| WLD 115 | SMAW (Stick) Plate |  |

ISC 141 Prod Activity Control (3)
ISC 221 Statistical Qual Control (3)
WLD 111 Oxy-Fuel Welding (2)
WLD 112 Basic Welding Processes (2)
WLD 115 SMAW (Stick) Plate

Total Semester Credit Hours in Programs
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Mechanical Drafting Technology Certificate Options

 CAD Drafting Certficiate| DFT | 111 | Technical Drafting I | $\mathbf{4}$ | $(2$ | $6)$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| DFT | 151 | CAD I | $\mathbf{3}$ | $(2$ | $3)$ |
| DFT | 152 | CAD II | $\mathbf{3}$ | $(2$ | $3)$ |
| DFT | 153 | CAD III | $\mathbf{3}$ | $(2$ | $3)$ |
| MEC | 110 | Intro to CAD/CAM | $\underline{\mathbf{2}}$ | $\underline{(1}$ | $2)$ |
|  |  | Total Hours in Certificate Curriculum | $\mathbf{1 5}$ | $\mathbf{( 9}$ | $\mathbf{1 7 )}$ |

## Mechancial Drafting Certificate

| DFT | 111 | Technical Drafting I | $\mathbf{4}$ | $(2$ | $6)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DFT | 112 | Technical Drafting II | $\mathbf{4}$ | $(2$ | $6)$ |
| DFT | 121 | Intro. To GD \& T | $\mathbf{2}$ | $(1$ | $2)$ |
| DFT | 152 | CAD II | $\mathbf{3}$ | $(2$ | $3)$ |
| DFT | 211 | Gears, Cams \& Pulleys | $\mathbf{2}$ | $(1$ | $3)$ |
| DFT | 214 | Descriptive Geometry |  |  |  |
|  |  | Total Hours in CertificateCurriculum | $\underline{\mathbf{2}}$ | $\underline{(1)}$ | $\underline{2)}$ |
|  |  | $\mathbf{1 7}$ | $\mathbf{( 9}$ | $\mathbf{2 2 )}$ |  |

# Medical Assisting [A45400] <br> A.A.S. Degree 

## Curriculum Description:

The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures.

Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, medical transcription, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of CAAHEP accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.

## Course and Hour Requirements

|  | Title | Credits | Hours Class | Lab | Clinical |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |  |  |
| *ENG 111 | Expository Writing | 3 | (3 | 0 | $0)$ |
| ENG 115 | Oral Communication | 3 | (3 | 0 | $0)$ |
| MAT 110 | Mathematical Measurements | 3 | (2) | 2 | $0)$ |
| *PSY 118 | Interpersonal Psychology | 3 | (3 | 0 | $0)$ |
| - - | Humanities/Fine Arts Elective | 3 | 13 | $\underline{0}$ | 0) |
| Total General Education Required Hours |  | 15 | (14 | 2 | 0) |
| Major Required Courses |  |  |  |  |  |
| *ACA 111 | College Student Success | 1 | (1 | 0 | $0)$ |
| *MED 110 | Orientation to Medical Assisting | 1 | (1 | 0 | $0)$ |
| *MED 116 | Introduction to Anatomy \& Physiology | 4 | (3 | 2 | $0)$ |
| *MED 118 | Medical Law \& Ethics | 2 | (2 | 0 | $0)$ |
| *MED 121 | Medical Terminology I | 3 | (3 | 0 | $0)$ |
| *MED 122 | Medical Terminology II | 3 | (3 | 0 | $0)$ |
| *MED 130 | Administrative Office Procedures I | 2 | (1 | 2 | $0)$ |
| *MED 131 | Administrative Office Procedures II | 2 | (1 | 2 | $0)$ |
| *MED 134 | Medical Transcription I | 3 | (2 | 2 | $0)$ |
| *MED 140 | Exam Room Procedures I | 5 | (3 | 4 | $0)$ |
| *MED 150 | Laboratory Procedures I | 5 | (3 | 4 | $0)$ |
| MED 230 | Administrative Office Procedures III | 2 | (1 | 2 | $0)$ |
| MED 240 | Exam Room II | 5 | (3 | 4 | $0)$ |
| MED 250 | Laboratory Procedures II | 5 | (3) | 4 | $0)$ |
| *MED 260 | MED Clinical Externship | 5 | (0) | 0 | 15) |
| MED 270 | Symptomatology | 3 | (2 | 2 | $0)$ |
| MED 272 | Drug Therapy | 3 | (3) | 0 | $0)$ |
| *OST 131 | Keyboarding | 2 | (1 | 2 | $0)$ |
| *OST 134 | Text Entry \& Formatting |  | (3) | $\underline{2}$ | 0) |
| Total | Major Required Hours | 60 | (39 | 32 | 15) |
| Total Semester Credit Hours in Program |  |  |  |  |  |
| *Hours required for Diploma - 48 SHC |  |  |  |  |  |

# Motorsports Management Technology <br> A.A.S. Degree <br> (Approval Pending) 

## Curriculum Description:

The Motorsports Management Technology curriculum is designed to provide students with the knowledge and skills necessary to perform mid-management level functions in motorsports related companies.

Course work includes instruction in general studies, motorsports fundamentals, principles of management, computer applications, accounting, business mathematics, marketing, advertising and sales promotion, and human relations.

Graduates should qualify for employment/advancement in jobs related to management of motorsports teams/events/activities, as well as production and distribution of motorsports products and services.

Mitchell Community College is offering the Motorsports Management Technology program in collaboration with Rowan-Cabarrus Community College. All MSM courses will be taught by RCCC at their South Campus in Concord. The degree will be conferred by both MCC and RCCC and awarded at MCC graduation.

This is a limited enrollment program with students being accepted according to a "first to qualify" basis. Please see an admission counselor for criteria used for admission into the program

## Course and Hour Requirements

$\left.\begin{array}{llrrr}\begin{array}{lll}\text { Title } \\ \text { General Education Required Courses }\end{array} & \text { Credit } & \begin{array}{c}\text { Hours } \\ \text { (Class }\end{array} & \text { Lab) } \\ \text { ENG } & 111 & \text { Expository Writing } \\ \text { ENG } & 114 & \text { Professional Research \& Reporting } & \mathbf{3} & (3\end{array}\right) 0$ )
2)
2)2)2)0 )2)2)$0)$34)

## Nursing Assistant [C45480] Certificate Program

## Curriculum Description:

The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages.

Course work emphasizes growth and development throughout the life span, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management; family resources and services; and employment skills.

Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities, and doctor's offices.

## Course and Hour Requirements

Title

## General Education Courses

None
Major Required Courses

| NAS | 101 | Nursing Assistant I | $\mathbf{5}$ | $(3$ | 2 | $3)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| NAS | 102 | Nursing Assistant II | $\mathbf{6}$ | $(3$ | 2 | $6)$ |
| NAS | 103 | Home Health Care | $\mathbf{2}$ | $(2$ | 0 | $0)$ |
| NAS | 104 | Home Health Clinical | $\mathbf{1}$ | $(0$ | 0 | $3)$ |
|  | Total Semester Credit Hours in Program |  |  |  |  | $\mathbf{1 4}$ |

## Office Systems Technology [A25360] <br> A.A.S. Degree

## Curriculum Description:

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

## Course and Hour Requirements

|  |  | Course |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Title | Credits | Hours | Lab |
| Gener | al Ed | cation Courses |  |  |  |
| ENG | 111 | Expository Writing | 3 | (3 | $0)$ |
| ENG | 114 | Professional Research and Reporting | 3 | (3 | $0)$ |
| ENG | 115 | Oral Communications | 3 | (3 | $0)$ |
| MAT | 140 | Survey of Mathematics | 3 | (3 | $0)$ |
| PSY | 118 | Interpersonal Psychology | 3 | (3 | $0)$ |
| - | - | Humanities/Fine Arts Elective | $\underline{3}$ | (3) | 0) |
|  | Total | General Education Hours | 18 | (18 | 0) |
| Major | Requ | ired Courses |  |  |  |
| ACA | 111 | College Student Success | 1 | (1 | 0) |
| ACC | 120 | Principles of Accounting I | 4 | (3 | 2) |
| ACC | 140 | Payroll Accounting | 2 | (1 | 2) |
| BUS | 110 | Introduction to Business | 3 | (3 | $0)$ |
| BUS | 115 | Business Law I | 3 | (3 | 0) |
| BUS | 121 | Business Math | 3 | (2 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2) | 2) |
| CIS | 120 | Spreadsheet I | 3 | (2 | 2) |
| CIS | 152 | Database Concepts \& Apps | 3 | (2 | 2) |
| NET | 110 | Data Comm/Networking | 3 | (2 | 2) |
| OST | 131 | Keyboarding | 2 | (1 | 2) |
| OST | 134 | Text Entry and Formatting | 4 | (3 | 2) |
| OST | 136 | Word Processing | 2 | (1 | 2) |
| OST | 164 | Text Editing Applications | 3 | (3 | $0)$ |
| OST | 181 | Introduction to Office Systems | 3 | (3 | 0) |
| OST | 184 | Records Management | 2 | (1 | 2) |
| OST | 223 | Machine Transcription I | 2 | (1 | 2) |
| OST | 236 | Advanced Word/Information Processing | 3 | (2) | 2) |
| OST | 286 | Professional Development | 2 | (2 | 0) |
| OST | 289 | Office Systems Management | 3 | (2 | 2) |
|  | - | Elective* | $\underline{3}$ | (3) | 0) |
|  | Tota | Major Required Hours | 57 | $(43$ | 28) |

*Approved Major Electives:
ECO 252 Principles of Macroeconomics (3)
COE - Cooperative Education (1-3)
Total Semester Credit Hours in Program
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Phlebotomy [C45600] Certificate Program

## Curriculum Description:

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communication skills, and maintaining patient data.

Graduates may qualify for employment in hospitals, clinics, physicians's offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

## Course and Hour Requirements

Title

Credits | Hours |
| :--- | :--- |
| Class | Lab Clinical

## General Education Courses <br> None

| Major Required Courses |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| PBT | 100 | Phlebotomy Technology | $\mathbf{6}$ | $(5$ | 2 |  |
| PBT | 101 | Phlebotomy Practicum | $\mathbf{3}$ | $(0$ | 0 |  |
| PSY | 118 | Interpersonal Psychology | $\underline{\mathbf{3}}$ | $\underline{(3}$ | $\underline{0}$ |  |
| Total | $\underline{0}$ |  |  |  |  |  |
| Semester Credit Hours in Program | $\mathbf{1 2}$ | $\mathbf{( 8}$ | $\mathbf{2}$ | $\mathbf{9})$ |  |  |

## Speech-Language Pathology Assistant [A45730] <br> A.A.S. Degree

## Curriculum Description:

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist, who evaluates, diagnoses, and treats individuals with communication disorders.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed to remediate individual communication problems. Supervised field experiences include working with patients of various ages and with various disorders.

Graduates may be eligible for registration with the North Carolina Board of Examiners for SpeechLanguage Pathologists and Audiologists and must be supervised by a licensed Speech-Language Pathologist. They may be employed in healthcare or education settings.

Mitchell Community College is offering the Speech-Language Pathology Assistant program in collaboration with four other community colleges in the Northwest Allied Health Project. This is a limited enrollment program with only the first year, Phase I, being offered by MCC. Phase II, the second year, of the program must be completed at Caldwell Community College and Technical Institute at Hudson, North Carolina. See the Director of Health Care programs or an admissions counselor for admissions information.

## Course and Hour Requirements

## Phase I

## Title

General Education Required Courses

| ENG | 111 | Expository Writing | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: |
| ENG | 114 | Professional Research \& Reporting | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| BIO | 168 | Anatomy \& Physiology I | $\mathbf{4}$ | $(3$ | 3 | $0)$ |
| PSY | 150 | General Psychology | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| - | - | Humanities/Fine Arts Elective | $\underline{\mathbf{3}}$ | $\underline{(3}$ | $\underline{0}$ | $\underline{0}$ |
|  | Total General Education Required Hours |  | $\mathbf{1 6}$ | $\mathbf{( 1 5}$ | $\mathbf{3}$ | $\mathbf{0})$ |

Major Required Courses

| ACA | 111 | College Student Success | $\mathbf{1}$ | $(1$ | 0 | $0)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BIO | 169 | Anatomy \& Physiology II | $\mathbf{4}$ | $(3$ | 3 | $0)$ |
| ENG | 115 | Oral Communication | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| OST | 131 | Keyboarding | $\mathbf{2}$ | $(1$ | 2 | $0)$ |
| PSY | 241 | Developmental Psychology | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| PSY | 255 | Intro to Exceptionality | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| PSY | 265 | Behavioral Modification | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| - | $\underline{\mathbf{3}}$ | $\underline{3}$ | $\underline{0}$ | $\underline{0}$ |  |  |
| Total Major | Required Hours | $\mathbf{2 2}$ | $\mathbf{( \mathbf { 2 0 }}$ | $\mathbf{5}$ | $\mathbf{0})$ |  |

## Phase II

Phase I must be completed with a grade of C or better on all courses in order to continue with Phase II.

## Major Required Courses

| SLP | 111 | Intro to Speech-Language Pathology | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SLP | 112 | SLP Pathophysiology | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| SLP | 120 | SLP Administrative Office Procedures | $\mathbf{3}$ | $(2$ | 0 | $0)$ |
| SLP | 130 | Phonetics/Speech Patterns | $\mathbf{3}$ | $(2$ | 2 | $0)$ |
| SLP | 140 | Normal Communications | $\mathbf{3}$ | $(3$ | 0 | $0)$ |
| SLP | 211 | Disorders and Treatment I | $\mathbf{4}$ | $(3$ | 2 | $0)$ |
| SLP | 212 | Disorders and Treatment II | $\mathbf{4}$ | $(3$ | 2 | $0)$ |
| SLP | 220 | Assistive Technology | $\mathbf{2}$ | $(1$ | 2 | $0)$ |
| SLP | 230 | SLP Fieldwork* | $\mathbf{4}$ | $(0$ | 0 | $12)$ |
| SLP | 231 | Fieldwork Seminar | $\underline{\mathbf{3}}$ | $(\underline{3}$ | $\underline{0}$ | $\underline{0}$ |
|  | Total | Major Required Hours | $\mathbf{3 2}$ | $\mathbf{( 2 3}$ | $\mathbf{8}$ | $\mathbf{1 2})$ |

Total Semester Credit Hours in Program ..... 70
*Clinical hours will be arranged locally if possible.
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

# Welding Technology [D50420] <br> Diploma Program 

## Curriculum Description:

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and nondestructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career Opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Course and Hour Requirements

| Title |  |  | Credits | Hours Class | Lab |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Education Required Courses |  |  |  |  |  |
| ENG | 102 | Applied Communications II | 3 | (3) | $0)$ |
| MAT | 110 | Mathematical Measurement | $\underline{3}$ | (2) | 2) |
|  | Total | General Education Required Hours | 6 | (5 | 2) |
| Major Required Courses |  |  |  |  |  |
| ACC | 111 | College Student Success | 1 | (1 | $0)$ |
| BPR | 111 | Blueprint Reading | 2 | (1 | 2) |
| CIS | 110 | Introduction to Computers | 3 | (2 | 2) |
| DFT | 119 | Basic CAD | 2 | (1 | 2) |
| ISC | 112 | Industrial Safety | 2 | (2 | 0) |
| WLD | 110 | Cutting Processes | 2 | (1 | 3) |
| WLD | 115 | SMAW (Stick) Plate | 5 | (2 | 9) |
| WLD | 121 | GMAW (MIG) FCAW/Plate | 4 | (2 | 6) |
| WLD | 131 | GTAW (TIG) Plate | 4 | (2 | 6) |
| WLD | 141 | Symbols \& Specifications | 3 | (2 | 2) |
| WLD | 143 | Welding Metallurgy | 2 | (1 | 2) |
| WLD | 261 | Certification Practices | 2 | (1 | 3) |
| WLD | 262 | Inspection \& Testing | 3 | (2) | 2) |
| - | - | Major Elective* | $\underline{3}$ | (3) | 0) |
| Total Major Required Hours |  |  | 38 | (23 | 39) |

*Approved Major Electives:
CSC 132 BASIC Programming (3)
DFT 151 CAD I (3)
ELC 111 Intro. to Electricity (3)
COE - Cooperative Education (1-3)
Total Semester Credit Hours in Program
Students who test into two or more developmental areas are required to take ACA 111, others are exempt and are not required to have this hour of credit for graduation.

## Welding Technology

## Certificate Option

| Prefix | Title | Credit | Class | Lab |  |  |  |  |
| :--- | :--- | ---: | :---: | ---: | :---: | :---: | :---: | :---: |
| WLD 110 | Cutting Processes | 2 | $(1$ | $3)$ |  |  |  |  |
| WLD 115 | SMAW (Stick) Plate | 5 | $(2$ | $9)$ |  |  |  |  |
| WLD 121 | GMAW (MIG) FCA W/Plate | 4 | $(2$ | $6)$ |  |  |  |  |
| WLD 131 | GTAW (TIG) Plate | 4 | $(2$ | $6)$ |  |  |  |  |
| WLD 141 | Symbols \& Specification | $\underline{3}$ | $\underline{(2}$ | $\underline{2})$ |  |  |  |  |
| Total Hours for Certificate |  |  |  |  |  | $\mathbf{1 8}$ | $\mathbf{9}$ | $\mathbf{2 6}$ |

## Curriculum Course DESCRIPTIONS



## ■ Curriculum Course Descriptions

## ACADEMIC RELATED

ACA 111<br>Prerequisites:<br>Corequisites:<br>College Student Success

Class Lab Credit
$1 \quad 0 \quad 1$

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives. Required of all students testing into two or more developmental areas; other students are exempt.

## ACCOUNTING

$\begin{array}{llllll}\text { ACC } 120 & \text { Prin Of Accounting I } & 3 & 2 & 4\end{array}$
Prerequisites/
Corequisites:
BUS 121 or completion of MAT 140 or higher math course and satisfacotry reading placement test score or completion of RED 090

This course introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting.

ACC 121
Prerequisites:
Corequisites:

Prin of Accounting II
ACC 120
None

This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management.

| ACC 131 | Federal Income Taxes | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Emphasis is placed on the application of the Internal Revenue Code to preparation of tax returns for individuals, partnerships, and corporations. Upon completion, students should be able to complete federal tax returns for individuals, partnerships, and corporations.

ACC 140
Prerequisites:
Corequisites:

## Payroll Accounting

ACC 115 or ACC 120
None

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/ posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: | :---: |
| ACC 149 | Intro to Acc Spreadsheets | 3 | 0 | 3 |
| Prerequisites: | ACC 115 or ACC 120 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

| ACC 150 | Computerized Gen Ledger | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ACC 115 or ACC 120 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems.

ACC 151 Acct Spreadsheet Appl $1 \begin{array}{lll}2 & 2\end{array}$
Prerequisites:
Corequisites:

ACC 149
None

This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| ACC 220 | Intermediate Accounting I | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ACC 121 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyses of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC 221 Intermediate Acct II $\begin{array}{llll} & 3 & 2 & 4\end{array}$
Prerequisites: ACC 220
Corequisites:
None
This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

| ACC 225 | Cost Accounting | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ACC 121 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

## Class Lab Credit

ACC 226
Prerequisites: Corequisites:

Managerial Accounting
ACC 121
None

3

This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management. This course is intended for students planning to sit for professional accounting certification examinations.

ACC 227 Practices in Accounting 3
Prerequisites:
Corequisites:

ACC 220
None

This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations.

| ACC 240 | Gov \& Not-for-Profit Acct | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ACC 121 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 250
Prerequisites:
Corequisites:

| Advanced Accounting | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |
| ACC 220 |  |  |  |
| None |  |  |  |

This course is designed to analyze the special problems in accounting for business combinations and consolidated corporate entities. Emphasis is placed on accounting for mergers and consolidations and preparing consolidated working papers and consolidated financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures. This course is intended for students planning to sit for professional accounting certification examinations.

ACC 269 Auditing 3
Prerequisites:
Corequisites:

ACC 220
None

This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit. This course is intended for students planning to sit for professional accounting certification examinations.

## AIR CONDITIONING, HEATING, AND REFRIGERATION

| AHR 110 | Intro to Refrigeration | 2 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

| AHR 111 | HVACR Electricity | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

| AHR 112 | Heating Technology | 2 | 4 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

| AHR 113 | Comfort Cooling | 2 | 4 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

| AHR 114 | Heat Pump Technology | 2 | 4 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 110 or AHR 113 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

## Class Lab Credit

| AHR 115 | Refrigeration Systems | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

| AHR 120 | HVACR Maintenance | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:

None
This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

AHR 125 HVAC Electronics 1 |  | 3 | 2 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:

AHR 111 or ELC 111
This course introduces the common electronic control components in HVAC systems. Emphasis is placed on identifying electronic components and their functions in HVAC systems and motor-driven control circuits. Upon completion, students should be able to identify components, describe control circuitry and functions, and use test instruments to measure electronic circuit values and identify malfunctions.

| AHR 130 | HVAC Controls | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 111 or ELC 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analyis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

| AHR 133 | HVAC Servicing | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 112 or AHR 113 |  |  |  |
| Corequisites: |  |  |  |  |

The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

| AHR 135 | Transport Refrigeration | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the equipment and components commonly found in commercial transport refrigeration systems. Topics include compressors, evaporators, metering devices, accessories, and related electrical components. Upon completion, students should be able to safely maintain, troubleshoot, and repair transport refrigeration components.

AHR 140
Prerequisites:
Corequisites:

All-Weather Systems
AHR 112 or AHR 113
None

This course covers the principles of combination heating and cooling systems including gas-electric, allelectric, and oil-electric systems. Topics include PTAC's and package and split-system units. Upon completion, students should be able to understand systems performance and perform routine maintenance procedures.

| AHR 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

| AHR 152 | HVAC Duct Systems II | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | AHR 151 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the techniques used to lay out and fabricate more advanced types of duct work found in HVAC systems. Emphasis is placed on the skills required to work with complex rectangular and round fittings and transitions. Upon completion, students should be able to lay out and fabricate complex rectangular and round fittings.

| AHR 160 | Refrigerant Certification | 1 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

| AHR 180 | HVACR Customer Relations | 1 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites: None
This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion, students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

| AHR 210 | Residential Building Code | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

| AHR 211 | Residential System Design | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

## ANTHROPOLOGY

Prerequisites:
Corequisites:

ANT 210 General Anthropology | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

General Anthropology 3003
None

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## ART

ART 111 Art Appreciation | 3 | 0 | 3 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:

Art Appreciation
None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

| ART 114 | Art History Survey I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

| ART 115 | Art History Survey II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: | :---: |
| ART 121 | Design I | 1 | 4 | 3 |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art.

ART 131 Drawing I 00 | 6 | 3 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:

None
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

| ART 132 | Drawing II | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ART 131 |  |  |  |
| Corequisites: | None |  |  |  |

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques.

| ART 191 | Selected Topics in Art | $0-1$ | $0-3$ | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the program |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

| ART 231 | Printmaking I | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods.

| ART 240 | Painting I | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form.

| ART 241 | Painting II | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ART 240 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety.

| ART 244 | Watercolor | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media.

| ART 281 | Sculpture I | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ART 132 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches.

| ART 282 | Sculpture II | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ART 281 |  |  |  |
| Corequisites: | None |  |  |  |

This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture.

| ART 283 | Ceramics I | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an introduction to three-dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression.

| ART 284 | Ceramics II | 0 | 6 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ART 283 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness.

ART 288
Prerequisites:
Corequisites:

## Class Lab Credit

Studio $0 \quad 6 \quad 3$
Limited to those who have completed a sequence of art courses in the proposed area of study.

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques.

ART 289 Museum Study | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

Museum Study $\begin{array}{llll} & 2 & 2 & 3\end{array}$
None
This course introduces research methods in the museum setting. Emphasis is placed on the chronology, styles, periods, context, and meaning in art. Upon completion, students should be able to demonstrate the advantage of first-hand and on-site research.

## BIOLOGY

| BIO 111 | General Biology I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites
Corequisites:

General Biology I
None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

| BIO 112 | General Biology II | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | BIO 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the
BIO 163 Basic Anat \& Physiology 4

Prerequisites:
Corequisites: None
This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships.

## BIO 168

Prerequisites:
Corequisites:

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, special senses, and endocrine systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

| BIO 169 | Anatomy and Physiology II | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | BIO 168 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

| BIO 170 | Introductory Microbiology | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

Introductory Microbiology
None

This course introduces fundamental concepts of microbiology with emphasis on the relationships of microorganisms to humans. Topics include common groups of microorganisms and their relationships to human disease, including means of transmission, body defenses, prevention, control, and treatment. Upon completion, students should be able to practice and recognize the value of aseptic technique in microbial control.

## BLUEPRINT READING

BPR 111 Blueprint Reading | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

Blueprint Reading
None

This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

## BPR 121

Prerequisites:
Corequisites:

Blueprint Reading: Mech
BPR 111 or MAC 131
None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

BPR 130 Blueprint Reading/Const 1 | 2 | 2 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:

## None

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

BPR 135
Prerequisites: Corequisites:

None
This course introduces schematics and diagrams used in a variety of occupations. Topics include interpretation of wiring diagrams, assembly drawings, exploded views, sectional drawings, and service manuals, specifications, and charts. Upon completion, students should be able to research and locate components and assemblies denoting factory specifications and requirements from service and repair manuals.

## BUSINESS

| BUS 110 | Introduction to Business | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

| BUS 115 | Business Law I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

| BUS 116 | Business Law II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | BUS 115 |  |  |  |
| Corequisites: | None |  |  |  |

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, riskbearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 121 Business Math | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

| BUS 135 | Principles of Supervision | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place.

Prerequisites:
Corequisites:

None

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.
BUS 147 Business Insurance 3

Prerequisites: Corequisites: None

This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.
BUS 151 People Skills 3

Prerequisites: Corequisites: None

This course introduces the basic concepts of identity and communication in the business setting. Topics include self-concept, values, communication styles, feelings and emotions, roles versus relationships, and basic assertiveness, listening, and conflict resolution. Upon completion, students should be able to distinguish between unhealthy, self-destructive, communication patterns and healthy, non-destructive, positive communication patterns.
BUS 152 Human Relations $\quad 3 \quad 0 \quad 3$

Prerequisites: Corequisites: None

This course introduces the concepts of effective human interaction in the business work environment. Topics include effective communication techniques, motivation, ego states, stress, and conflict. Upon completion, students should be able to explain the importance of human relations, apply motivational techniques, and implement strategies for resolving work-related conflicts.

| BUS 153 | Human Resource Management | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites: Corequisites: None

This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS 225
Prerequisites:
Corequisites:

Business Finance
ACC 120
None

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

BUS 230 Small Business Management
Prerequisites:
Corequisites: None
This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.
BUS 231 Computerized Inventory
Prerequisites: $A C C$ 120 and CIS 110 or CIS 111
Corequisites: None

This course provides an overview of inventory procedures as related to management decisions. Emphasis is placed on general terms, methods, techniques, and computer applications. Upon completion, students should be able to apply inventory principles and processes in the workplace.

| BUS 235 Performance Management | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |

This course includes the legal background for performance management and the basic methodology used in developing and validating a performance management system. Emphasis is placed on job analysis, job descriptions, appraisal instruments, and action plans. Upon completion, students should be able to develop, implement, and maintain a comprehensive performance management system.

BUS 239 Bus Applications Seminar $\begin{array}{llll}1 & 2 & 2\end{array}$
Prerequisites: ACC 120, BUS 115, BUS 137, MKT 120, and either ECO 151, 251 or 252
Corequisites: None
This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place.

| BUS 252 Labor Relations | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |
| Corequisites: | None |  |  |

This course covers the history of the organized labor movement and the contractual relationship between corporate management and employees represented by a union. Topics include labor laws and unfair labor practices, the role of the NLRB, organizational campaigns, certification/decertification elections, and grievance procedures. Upon completion, students should be able to act in a proactive and collaborative manner in an environment where union representation exists.
BUS 253 Leadership and Mgt Skills $\quad 3 \quad 0 \quad 3$

Prerequisites:
Corequisites: None
This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

## BUS 260 Business Communication <br> Prerequisites: ENG 111 and OST 130 or OST 131 <br> Corequisites: None

 Class Lab CreditThis course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

| BUS 270 Professional Development | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |
| Corequisites: | None |  |  |

This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job.

## CHEMISTRY

CHM 130 Gen, Org, \& Biochemistry $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites: None
This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts.

CHM 151 General Chemistry I
$3 \quad 3 \quad 4$
Prerequisites:
Corequisites: None
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CHM 152 General Chemistry II
Prerequisites: CHM 151
Corequisites: None
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an

## INFORMATION SYSTEMS

CIS 110 Introduction to Computers $\quad$ Class Lab |  | Credit |
| :--- | :--- | ---: | :--- |

Prerequisites: RED 080, MAT 080, OST 080 or satisfactory scores on placement tests Corequisites: None

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems.

| CIS 115 Intro to Prog \& Logic | 2 | 2 | 3 |
| :--- | :--- | :---: | :---: |
| Prerequisites: | MAT 080 or MAT | 090, RED 080, OST 080 | or satisfactory scores on |
| Corequisites: | placement tests | None |  |

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language.

| CIS 120 | Spreadsheet I | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | CIS 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.


The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance.

| CIS 147 | Operating System - Windows $^{\text {TM }}$ | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | CIS 130 |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces operating systems concepts for a Windows ${ }^{\mathrm{TM}}$ operating system. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a Windows ${ }^{\mathrm{TM}}$ environment.

Prerequisites: Corequisites:

CIS 110, CIS 111 or CIS 115
None

This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

| CIS 164 | DTP Layout \& Design | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | OST 131, CIS 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the fundamentals of design and page layout. Emphasis is placed on page layout organization, typography, and color. Upon completion, students should be able to create projects that visually enhance communication.

| CIS 172 | Intro to the Internet | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools.

## CRIMINAL JUSTICE

| CJC 100 | Basic Law Enforcement Trn | 9 | 27 | 18 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination. This is a certificate-level course.

CJC 111 Intro to Criminal Justice $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites:
None
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

CJC 112 Criminology $\quad 3 \begin{array}{lll}3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113
Prerequisites:
Corequisites:

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.
CJC 121 Law Enforcement Operations 3

Prerequisites:
Corequisites:
None

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations.

CJC 131
Criminal Law
30
3
Prerequisites:
Corequisites:
None

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132 Court Procedure \& Evidence $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites:
None
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

## CJC 141 Corrections $\quad 3 \quad 0 \quad 3$

Prerequisites:
Corequisites:
None
This course covers the history, major philosophies, components, and current pracices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

| CJC 211 | Counseling | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

CJC 212
Ethics \& Comm Relations

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

Prerequisites: Corequisites:

None
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 215 Organization \& Administration |  | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:
None

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

| CJC 221 | Investigative Principles | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 222 Criminalistics $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites:

> None

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

CJC 225
Prerequisites:
Corequisites:

Crisis Intervention
None

This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem-solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/ or stressful incidents that require field analysis and/or resolution.

Prerequisites:
Corequisites:

None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/ procedures as interpreted by the courts.

## COOPERATIVE EDUCATION

COE 110
World of Work
Class Lab Clin. Credit

Prerequisites:
Corequisites:
This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.
COE 111 Co-op Work Experience I $\quad 0 \quad 0 \quad 10$

Prerequisites:
Corequisites:
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 112 Co-op Work Experience I $\quad 0 \quad 0 \quad 0 \quad 20$
Prerequisites:
Corequisites:
This course provides work experience with a college approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

| COE 121 | Co-op Work Experience II | 0 | 0 | 10 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |  |

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 122
Prerequisites:
Corequisites:
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 131 <br> Co-op Work Experience III $\quad 0 \quad 0 \quad 10$

Prerequisites:
Corequisites:
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 132 Co-op Work Experience III $\begin{array}{llllll} & 0 & 0 & 20 & 2\end{array}$
Prerequisites:
Corequisites:
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COSMETOLOGY

COS 11
Prerequisites:
Corequisites:

Cosmetology Concepts I
COS 112

This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS 112 Salon I $\quad 0 \quad 24$|  | 8 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:

Salon I

COS 111

This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

| COS 113 | Cosmetology Concepts II | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | COS 111 and COS 112 |  |  |  |
| Corequisites: | COS 114 |  |  |  |

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

|  |  | Class | Lab | Credit |
| :--- | :--- | ---: | ---: | :---: |
| COS 114 | Salon II | 0 | 24 | 8 |
| Prerequisites: | COS 112 |  |  |  |
| Corequisites: | COS 113 |  |  |  |

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

| COS 115 | Cosmetology Concepts III | 4 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | COS 111 and COS 112 |  |  |  |
| Corequisites: | COS 116 |  |  |  |

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

| COS 116 | Salon III | 0 | 12 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | $\operatorname{COS} 115$ |  |  |  |

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

| COS 118 | Salon IV | 0 | 21 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | COS 114 and $\operatorname{COS} 116$ |  |  |  |
| Corequisites: | $\operatorname{COS} 117$ |  |  |  |

This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

| COS 120 | Esthetics | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the concepts and techniques of esthetics. Topics include safety, skin care, make-up, aromatherapy, massage, and superfluous hair removal. Upon completion, students should be able to perform professional skin care and make-up services.

COS 123 Contemp Hair Coloring $\quad 1 \quad 3 \quad 2$

Prerequisites:
Corequisites:

COS 111 and COS 112
None

This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a client's color needs and safely and competently perform color applications and correct problems.

COS 124
Trichology \& Chemistry

| Class | Lab | Credit |
| :---: | :---: | :---: |
| 1 | 3 | 2 |

Prerequisites:
Corequisites:
None
This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

| COS 140 | Contemporary Design | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | COS 111 and $\operatorname{COS} 112$ |  |  |  |
| Corequisites: | None |  |  |  |

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.
$\begin{array}{lllll}\text { COS } 160 & \text { Design Applications } & 1 & 3 & 2\end{array}$
Prerequisites: Corequisites:

None
This course provides an overview of the design concepts used in cosmetology. Topics include the application of art principles and elements to artistically design hair, nails, and make-up and other related topics. Upon completion, students should be able to demonstrate knowledge and techniques associated with design concepts.

## COMPUTER SCIENCE

CSC 132
Prerequisites: Corequisites:

BASIC Programming 23
RED 080, MAT 080, OST 080 or satisfactory scores on placement tests None

This course is designed to introduce computer programming using the BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/ tables, and other related topics. Upon completion, students should be able to design, code, test, and debug BASIC language programs. Visual Basic will be used in this class.

CSC 135 COBOL Programming 2
Prerequisites: $\quad$ RED 080, MAT 080, OST 080 or satisfactory scores on placement tests Corequisites: None

This course introduces computer programming using the COBOL programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug COBOL language programs.

CSC 138
Prerequisites: Corequisites:

RPG Programming 2 3 3
RED 080, MAT 080, OST 080 or satisfactory scores on placement tests None

This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

CSC 143
Prerequisite
Corequisite:
Class

Object Oriented Programming $c$| Labedit |
| :--- |
| RED 080, MAT 080, OST 080 or satisfactory scores on placement tests |
| None |

This course introduces the concepts of object-oriented programming. Emphasis is placed on eventdriven programming methods, including creating and manipulating objects, classes, and using objectoriented tools such as the class debugger. Upon completion, students should be able to design, test, debug, and implement objects at the application level using the appropriate environment. This course is a unique concentration requirement of the Programming Concentration in the Information Systems program.

| CSC 232 | Advanced BASIC | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | CSC 132 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of CSC 132 using BASIC with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. This course is a unique concentration requirement in the Programming concentration in the Information Systems program. Visual Basic will be used in this class.

| CSC 235 | Advanced COBOL | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | CSC 135 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of CSC 135 using COBOL with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. This course is a unique concentration requirement in the Programming concentration in the Information Systems program.

| CSC 238 | Advanced RPG | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | CSC 138 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, subprograms, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. This course is a unique concentration requirement in the Programming concentration in the Information Systems program.

## DEVELOPMENTAL DISABILITIES

| DDT $\mathbf{1 1 0}$ | Developmental Disabilities | 3 | 0 | 0 | 3 |
| :--- | :--- | :---: | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course identifies the characteristics and causes of various disabilities. Topics include history of service provision, human rights, legislation and litigation, advocacy, and accessing support services. Upon completion, students should be able to demonstrate an understanding of current and historical developmental disability definitions and support systems used throughout the life span.

## DRAFTING

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| DFT 111 | Technical Drafting I | 2 | 6 | 4 |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

| DFT 112 | Technical Drafting II | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.

DFT 119 Basic CAD 1 | 19 | 2 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:

Basic CAD

None

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

DFT 121 Intro to GD \& T $\quad 1$| 1 | 2 | 2 |
| :--- | :--- | :--- |

Prerequisites: Corequisites:

None

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

DFT 151 CAD I $\begin{array}{llll}2 & 3 & 3\end{array}$
Prerequisites:
Corequisites:
None

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

| DFT 152 | CAD II | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 151 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| DFT 153 | CAD III | 2 | 3 | 3 |
| Prerequisites: | DFT 151 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers basic principles of three-dimensional CAD wireframe and surface models. Topics include user coordinate systems, three-dimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

| DFT 211 | Gears, Cams, \& Pulleys | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 111 and MAT 121 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the principles of motion transfer. Topics include gears, cams, pulleys, and drive components. Upon completion, students should be able to solve problems and produce drawings dealing with ratios.

| DFT 214 | Descriptive Geometry | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course includes a graphic analysis of space problems. Topics include points, lines, planes, connectors, and combinations of these. Upon completion, students should be able to solve real world spatial problems using descriptive geometry techniques.

| DFT 231 | Jig \& Fixture Design | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 112 and MEC 210, MEC 250 or MEC 252 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the study of jigs and fixtures. Topics include different types, components, and uses of jigs and fixtures. Upon completion, students should be able to analyze, design, and complete a set of working drawings for a jig or fixture.

| DFT 252 | Solid Models \& Renderings | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | DFT 153 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an in-depth study of three-dimensional solid modeling and design software. Topics include parametric design; creation, editing, and rendering of solid models; and generation of views. Upon completion, students should be able to use parametric design techniques to create and edit a threedimensional solid model, render it, and generate two-dimensional views. This course is a unique concentration requirement of the CAD Systems Management Concentration in the Mechanical Drafting Technology program.

## ECO $251 \quad$ Prin of Microeconomics

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

Prerequisites: Corequisites: None

This course introduces economic analysis of by individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

ECO 252 Prin of Macroeconomics $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites: None
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## ELECTRICITY

ELC 111 Intro to Electricity | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces the fundamental concepts of electricity and test equipment to non-electrical/ electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.
ELC 112 DC/AC Electricity $\quad 3 \quad 6 \quad 5$

Prerequisites:
Corequisites:
None
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

| ELC 113 | Basic Wiring I | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

ELC 114 Basic Wiring II
Class Lab Credit

Prerequisites: ELC 113
Corequisites: None
This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations.

| ELC 115 | Industrial Wiring | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELC 113 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

| ELC 117 | Motors and Controls | 2 | 6 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELC 112 or ELC 131 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

Prerequisites:
Corequisites:

ELC 118 National Electrical Code 1 | 2 | 2 |
| :--- | :--- | :--- |

## National Electrical Code

None

This course covers the use of the current National Electrical Code. Topics include the NEC history wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

| ELC 119 | NEC Calculations | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

## None

This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

| ELC 121 | Electrical Estimating | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELC 113 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the principles involved in estimating electrical projects. Topics include take-offs of materials and equipment, labor, overhead, and profit. Upon completion, students should be able to estimate simple electrical projects.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| ELC 125 | Diagrams and Schematics | 1 | 2 | 2 |

This course covers the interpretation of electrical diagrams, schematics, and drawings common to electrical applications. Emphasis is placed on reading and interpreting electrical diagrams and schematics. Upon completion, students should be able to read and interpret electrical diagrams and schematics.

## ELC 126 <br> Electrical Computations <br> $2 \quad 23$

Prerequisites:
Corequisites:
None
This course introduces the fundamental applications of mathematics which are used by an electrical/ electronics technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and usage of a scientific calculator. Upon completion, students should be able to solve simple electrical mathematical problems.

| ELC 127 | Software for Technicians | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations, applications, and controls. Upon completion, students should be able to utilize a personal computer for electrical/electronics- related applications.

| ELC 128 | Intro to PLC | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/ installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

| ELC 131 | DC/AC Circuit Analysis | 4 | 3 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 121 |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

| ELC 132 | Electrical Drawings | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the technical documentation that is typically found or used in the industrial environment. Topics include interpretation of service manuals, freehand sketching of lines, orthographic views and dimensions, and blueprint reading. Upon completion, students should be able to interpret technical documents and blueprints and use basic drafting skills to prepare usable field drawings.

## ELC 133

Prerequisites:
Corequisites:

Adv Circuit Analysis ELC 131
None

This course covers additional concepts of DC/AC electricity, the use of test equipment, and measurement techniques for electrical/electronics majors. Topics include the application of network theorems such as delta/wye transformations, Superposition Theorem, and other advanced circuit analysis principles. Upon completion, students should be able to construct and analyze DC/AC circuits used advanced circuit analysis theorems, circuit simulators, and test equipment.

| ELC 135 | Electrical Machines I | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELC 112, ELC 131, or ELC 140 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits.

ELC 215 Electrical Maintenance 203
Prerequisites: ELC 117
Corequisites:
None
This course introduces the theory of maintenance and the skills necessary to maintain electrical equipment found in industrial and commercial facilities. Topics include maintenance theory, predictive and preventive maintenance, electrical equipment operation and maintenance, and maintenance documentation. Upon completion, students should be able to perform maintenance on electrical equipment in industrial and commercial facilities.

ELC 228
Prerequisites:
Corequisites:

PLC Applications
ELC 128
None

This course continues the study of the programming and applications of programmable logic controllers. Emphasis is placed on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers.

ELC 229 Applications Project $\begin{array}{llll}1 & 3 & 2\end{array}$
Prerequisites: ELC 112, ELC 113 or ELC 140
Corequisites:
None
This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project.

## ELECTRONICS

ELN 131
Prerequisites: Corequisites:

## Electronic Devices

ELC 112, ELC 131, or ELC 140
None

## Class Lab Credit

$3 \quad 3 \quad 4$

This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thyristors, and related components . Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment.

ELN 132
Prerequisites:
Corequisites:

Linear IC Applications
ELN 131 or BMT 113
None
$3 \quad 3 \quad 4$

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment.

ELN 133
Prerequisites:
Corequisites:

Digital Electronics
ELN 111, ELC 112, ELC 131, or ELC 140
None
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ELN 135
Prerequisites:
Corequisites:

Electronic Circuits ELN 131
None

This course covers discrete component amplifiers, power supplies, wave-shaping, oscillators, and special purpose ICs. Topics include feedback, analog arithmetic circuits, current and voltage sources, amplifiers, timers, PLLs, filters, regulators, and other related circuits. Upon completion, students should be able to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on service information.

ELN 143
Prerequisites:
Corequisites:

Television Servicing
ELN 140
None

This course provides a detailed study of the operation and repair of television receiver systems. Topics include operation, alignment, and repair of television receiver systems. Upon completion, students should be able to troubleshoot, maintain, and repair television receiver systems.

ELN 152
Prerequisites:
Corequisites:

Fabrication Techniques
None

This course covers the fabrication methods required to create a prototype product from the initial circuit design. Topics include CAD, layout, sheet metal working, component selection, wire wrapping, PC board layout and construction, reverse engineering, soldering, and other related topics. Upon completion, students should be able to design and construct an electronic product with all its associated documentation.

ELN 229
Prerequisites: Corequisites:

Industrial Electronics
ELC 112, ELC 131, or ELC 140 None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit.

| ELN 231 | Industrial Controls | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELC 112 or ELC 131 or ELC 140 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the fundamental concepts of solid-state control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret ladder diagrams and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

| ELN 232 | Intro to Microprocessors | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELN 133 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

| ELN 234 | Communication Systems | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELN 132 or ELN 140 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

| ELN 236 | Fiber Optics and Lasers | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELN 234 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the fundamentals of fiber optics and lasers. Topics include the transmission of light; characteristics of fiber optic and lasers and their systems; fiber optic production; types of lasers; and laser safety. Upon completion, students should be able to understand fiber optic communications and basic laser fundamentals.

| ELN 244 | Computer Repair | 3 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ELN 133 or ELN 141 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the assembly, upgrading, and repair of microcomputers. Topics include logic test equipment, computer motherboards, storage devices, I/O devices, power supplies, and other peripherals. Upon completion, students should be able to assemble, upgrade, maintain, troubleshoot, and repair microcomputers.

Prerequisites:
Corequisites:

## None

This course provides a detailed study of PLC applications, with a focus on design of industrial control circuits using the PLC. Topics include PLC components, memory organization, math instructions, programming documentation, input/output devices, and applying PLCs in the design of industrial control systems. Upon completion, students should be able to design and program a PLC system to perform a wide variety of industrial control functions.

ELN 275 Troubleshooting $\begin{array}{lll}1 & 2 & 2\end{array}$
Prerequisites:
Corequisites:
ELN 133 or ELN 141
This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

## ENGLISH

ENG 080
Prerequisites:
Corequisites:

> Writing Foundations ENG 070 or ENG 075 or Satisfactory Placement Test Score None

This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph. This course does not satisfy the developmental reading and writing prerequisite for ENG 111.

## ENG 090

Prerequisites:
Corequisites:

> Composition Strategies
> ENG 080 or ENG 085
> None

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. This course satisfies the developmental writing requirement for ENG 111.

ENG 102
Prerequisites: Corequisites:

Applied Communications II 3
Satisfactory placement test score or ENG 080
None

This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. This is a diplomalevel course.

ENG 111<br>Prerequisites:<br>Corequisites:<br>Expository Writing<br>Class Lab Credit<br>ENG 090, RED 090, and OST 080 or Satisfactory Placement Test scores None

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

| ENG 112 | Argument-Based Research | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ENG 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

| ENG 113 | Literature-Based Research | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ENG 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

| ENG 114 | Prof Research \& Reporting | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ENG 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

| ENG 115 | Oral Communication | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

ENG 125
Prerequisites:
Corequisites:

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others.

## ENG 131 <br> Introduction to Literature <br> 30 <br> 3

Prerequisites:
Corequisites:
ENG 111
ENG 112, ENG 113, or ENG 114
This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 135 Intro. to Short Fiction 3
Prerequisites:
ENG 111
Corequisites:
ENG 112, ENG 113, or ENG 114
This course provides intensive study of short fiction as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of short fiction. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of short fiction.

ENG 231
Prerequisites:
Corequisites:

American Literature I
ENG 112, ENG 113, or ENG 114
None

303

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical, and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 232
Prerequisites: Corequisites:

American Literature II
ENG 112, ENG 113, or ENG 114
None

303

This coursecovers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 233
Prerequisites:
Corequisites:

Major American Writers
ENG 112, ENG 113, or ENG 114
None

This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 241
Prerequisites:
Corequisites:

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 242
Prerequisites:
Corequisites:

British Literature II
ENG 112, ENG 113, or ENG 114
None

303

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ENG 112, ENG 113, or ENG I14 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ENG 252 Western World Literature II $\quad 3 \quad 0 \quad 3$

Prerequisites:
Corequisites:

ENG 112, ENG 113, or ENG 114 None

This course provides a survey of selected European works from the Neoclassical period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## FRENCH

FRE 111 Elementary French I $\begin{array}{llll}3 & 0 & 3\end{array}$

Prerequisites: Corequisites:

None

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

FRE 112
Prerequisites:
Corequisites:

## Elementary French II

FRE 111
None

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

FRE 211
Prerequisites:
Corequisites:

## Intermediate French I

FRE 112
None

This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

FRE 212
Prerequisites: Corequisites:

Intermediate French II
FRE 211
None

This course is a continuation of FRE 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## GEOGRAPHY

## GEO 111

Prerequisites: Corequisites:

World Regional Geography
None

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## GEO 113

Prerequisites:
Corequisites:

Economic Geography
None

This course covers the patterns and networks of economic interdependence and how they affect human populations. Emphasis is placed on the economic aspects of the production and distribution of goods and services and their impact on the quality of human life. Upon completion, students should be able to describe different economic systems and demonstrate an understanding of the variables that influence economic development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

GEO 130
Prerequisites:
Corequisites:

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

General Physical Geography
None
This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

| GEO 131 | Physical Geography I | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the basic physical components that help shape the earth. Emphasis is placed on the geographic grid, cartography, weather, climate, biogeography, and soils. Upon completion, students should be able to identify these components and explain how they interact.

## GERONTOLOGY

| GRO 120 | Gerontology |
| :--- | :--- |
| Prerequisites: | PSY 150 |
| Corequisites: | None |

This course covers the psychological, social, and physical aspects of aging. Emphasis is placed on the factors that promote mental and physical well-being. Upon completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

## HEALTH

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| HEA 110 | Personal Health/Wellness | 3 | 0 | 3 |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness.

| HEA 112 | First Aid \& CPR | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

HEA 120 Community Health | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites: None

This course provides information about contemporary community health and school hygiene issues. Topics include health education and current information about health trends. Upon completion, students should be able to recognize and devise strategies to prevent today's community health problems.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| HIS 121 | Western Civilization I | 3 | 0 | 3 |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.

| HIS 122 | Western Civilization II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

| HIS 131 | American History I | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: | None |  |  |  |

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.

HIS 132 American History II |  | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

None
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 191
Prerequisites:
Corequisites:

Selected Topics in History
Enrollment in the program None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. Colleges may use the fourth sentence to specify other college requirements.

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

Prerequisites: Corequisites: None

This course provides an in-depth survey of European history from 1815 to 1914. Topics include the development of nationalism, liberalism, socialism, imperialism, and the origins of World War I. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in nineteenth-century Europe.
HIS 216 Twentieth-Century Europe $\quad 3 \quad 0 \quad 3$

Prerequisites: Corequisites: None

This course provides an in-depth survey of twentieth-century Europe. Topics include World Wars I and II, and political, social, and cultural movements of the twentieth century. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in twentiethcentury Europe.

HIS 226 The Civil War $\begin{array}{llll}3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course examines the social, political, economic, and ideological forces that led to the Civil War and Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War.

HIS 231 Recent American History 3
Prerequisites:
Corequisites: None
This course is a study of American society from the post-Depression era to the present. Topics include World War II, the Cold War, social unrest, the Vietnam War, the Great Society, and current political trends. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in recent America. The background to these events is reviewed from 1900 and the diplomatic impact of events is stressed as the United States moves into world leadership.

HIS 236 North Carolina History $\begin{array}{llll}3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina.

| HIS 293 | Selected Topics in History | $1-3$ | $0-6$ | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the program |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. Colleges may use the fourth sentence to specify other college requirements.

| HSE 110 | Class | Lab | Clin. | Credit |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Prerequisites: |  | 2 | 2 | 0 | 3 |
| Corequisites: | None to Human Services |  |  |  |  |

This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

| HSE 112 | Group Process I | 1 | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the HSE program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course introduces interpersonal concepts and group dynamics. Emphasis is placed on selfawareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to show competence in identifying and explaining how people are influenced by their interactions in group settings.

| HSE 123 | Interviewing Techniques | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

| HSE 125 | Counseling | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PSY 150 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

| HSE 160 | HSE Clinical Supervis I | 1 | 0 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
HSE 161, HSE 162, HSE 163, or HSE 164
This course provides an opportunity to discuss clinical experiences with peers and faculty. Emphasis is placed on discussing application of concepts and principles from related course content to clinical placement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes required in human services clinical experiences.

| HSE 163 | HSE Clinical Exp I | 0 | 0 | 9 | 3 |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Prerequisites: | Successful completion of 12 SHC in the HSE program |  |  |  |  |
| Corequisites: | HSE 160 |  |  |  |  |

This course provides supervised clinical experience in human services delivery agencies. Emphasis is placed on the application and practice of concepts, principles, knowledge, and skills from related course work. Upon completion, students should be able to demonstrate and apply skills, knowledge, and values from human services classes.

HSE 210
Prerequisites: Corequisites:

Human Services Issues
Class Lab Clin. Credit
Successful completion of 12 SHC in the HSE program None

This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

HSE 212 Group Process II $\quad 1 \begin{array}{llll} & 1 & 2 & 0\end{array}$
Prerequisites:
Corequisites:

HSE 112
None

This course is a continuation of the study of interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to demonstrate their ability to communicate with others and facilitate communications between others.

| HSE 215 | Health Care | 3 | 2 | 3 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the HSE program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patient's rights, legal and ethical responsibilities, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, medical terminology, and mental health. Upon completion, students should be able to demonstrate the skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide Registry.

HSE 225 Crisis Intervention $\quad 3 \quad 0 \quad 0 \quad 3$
Prerequisites:
Corequisites: None
This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

HSE 260
Prerequisites:
Corequisites:

HSE Clinical Supervis II | 1 | 0 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- |

Successful completion of 12 SHC in the HSE program
HSE 261, HSE 262, HSE 263, or HSE 264
This course provides an opportunity to discuss clinical experiences with peers and faculty. Emphasis is placed on discussing application of concepts and principles from related course content to clinical placement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes required in human services clinical experiences.

HSE 264
Prerequisites:
Corequisites:

HSE Clinical Exp II $\begin{array}{lllll}0 & 0 & 12 & 4\end{array}$
Successful completion of 12 SHC in the HSE program HSE 260

This course provides additional supervised clinical experience in human services delivery agencies Emphasis is placed on the application and practice of concepts, principles, knowledge, and skills from related course work. Upon completion, students should be able to demonstrate and apply skills, knowledge, and values from human services classes.

## HYDRAULICS

| HYD 110 | Hydraulics/Pneumatics I | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| Prerequisites: |  | 2 | 3 | 3 |
| Corequisites: | None |  |  |  |

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

## INDUSTRIAL SCIENCE

Prerequisites:
Corequisites:

ISC 110 Workplace Safety 1 | 1 | 0 | 1 |
| :--- | :--- | :--- |

Workplace Safety $1 \begin{array}{lll}1 & 0 & 1\end{array}$

None

This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace.

| ISC 112 | Industrial Safety | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment.
ISC 121 Envir Health \& Safety 3

Prerequisites:
Corequisites:

## None

This course covers workplace environmental, health, and safety issues. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental, health, and safety issues.

| ISC 130 | Intro to Quality Control | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces the philosophies, principles, and techniques of managing quality. Topics include the functions, responsibilities, structures, costs, reports, personnel, and vendor-customer relationships associated with quality control and management. Upon completion, students should be able to demonstrate an understanding of quality control and management.

## ISC 131

Prerequisites:
Corequisites:

Quality Management
None

This course provides a study and analysis of the aspects and implications of quality managment that lead to customer satisfaction through continuous quality improvement. Topics include Total Quality Management, ISO 9000, organizing for quality, supplier/vendor relationships, and the role of leadership in quality management. Upon completion, students should be able to demonstrate an understanding of quality management concepts and techniques.

Prerequisites:
Corequisites:
None
This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

ISC 140 Material \& Capacity Plan |  | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

None
This course covers materials requirements planning (MRP) and capacity requirements planning (CRP) Emphasis is placed on measuring the amount of work scheduled and determining the human, physical, and material resources necessary. Upon completion, students should be able to demonstrate an understanding of material and capacity requirements planning and be prepared for the APICS CPIM examination.
ISC 141 Prod Activity Control 3

Prerequisites:
Corequisites: None
This course covers a broad base of production operations in a wide variety of production environments. Emphasis is placed on the principles, approaches, and techniques needed to schedule, control, measure, and evaluate the effectiveness of production operations. Upon completion, students should be able to demonstrate an understanding of production activity control and be prepared for the APICS CPIM examination.
ISC 142 Inventory Management 3

Prerequisites: Corequisites:

Inventory Management
ISC 140

This course covers the principles, concepts, and techniques of managing inventory. Emphasis is placed on determining what to order, quantities to order, when items are needed, when to order, and how and where to store. Upon completion, students should be able to demonstrate an understanding of the process of inventory management and be prepared for the APICS CPIM examination.

| ISC 210 | Oper \& Prod Planning | 3 | 0 | 3 |
| :--- | :--- | ---: | ---: | ---: |
| Prerequisites: | Completion of curriculum mathematics requirement |  |  |  |
| Corequisites: | None |  |  |  |

This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

ISC 221
Prerequisites:
Corequisites:

Statistical Qual Control $3 \begin{array}{llll}3 & 0 & 3\end{array}$
Completion of curriculum mathematics requirement None

This course covers the principles and techniques of statistical process control for the improvement of productivity. Emphasis is placed on basic statistics for quality control, organization and procedures for efficient quality control including inspections, process control, and tests of significance. Upon completion, students should be able to apply statistical principles and techniques to enhance production.

MAC 121
Intro to CNC
Class Lab Credit

Prerequisites: Corequisites:

None

This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

| MAC 122 | CNC Turning | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites: Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

## MAC 124

Prerequisites:
Corequisites:

CNC Milling

None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

## MATHEMATICS

| MAT 060 | Essential Mathematics | 3 | 2 | 4 |
| :--- | :--- | :---: | :---: | :---: |
| Prerequisites: | MAT 050 or Satisfactory Placement Test Scores |  |  |  |
| Corequisites: | None |  |  |  |

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

| MAT 070 | Introductory Algebra | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 060 |  |  |  |
| Corequisites: | RED 080 or ENG 085 |  |  |  |

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| MAT 080 | Intermediate Algebra | 3 | 2 | 4 |
| Prerequisites: | MAT 070 |  |  |  |
| Corequisites: | RED 080 or ENG 085 |  |  |  |

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

| MAT 110 | Mathematical Measurement | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 070 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 070 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic, radical, exponential, and logarithmic functions; descriptive statistics; right triangle trigonometry; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

| MAT 122 | Algebra/Trigonometry II | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 121 |  |  |  |
| Corequisites: | None |  |  |  |

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, trigonometry, and systems of equations. Topics include translation and scaling of functions, Sine Law, Cosine Law, complex numbers, vectors, statistics, and systems of equations. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

| MAT 140 | Survey of Mathematics | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 070 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## MAT 151

Prerequisites:
Corequisites:

## Class Lab Credit

Statistics I<br>MAT 080 or MAT 090<br>None

This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| MAT 161 | College Algebra | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 080 or MAT 090 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomials, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| MAT 162 | College Trigonometry | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 161 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an integrated technological approach to trigonometry and its applications. Topics include trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

## MAT 175

Prerequisites:
Corequisites:

## Precalculus

High School Algebra III/Trigonometry
None
$4 \quad 0 \quad 4$

This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| MAT 263 | Brief Calculus | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 161 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 271
Prerequisites:
Corequisites:

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| MAT 272 | Calculus II | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 271 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a rigorous treatment of integration and is the second calculus course in a threecourse sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

| MAT 273 | Calculus III | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 272 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| MAT 285 | Differential Equations | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 272 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena.

## MECHANICAL

MEC 110 Intro to CAD/CAM 102

Prerequisites:
Corequisites:
None
This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/ CAM software to produce a CNC program.

# Class Lab Credit 

Prerequisites: Corequisites:

None
This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

MEC 160
Prerequisites:
Corequisites:
$\begin{array}{llll}\text { Mechanical Industrial Sys } & 1 & 3 & 2\end{array}$

This course covers mechanical components used in industrial machine operation. Emphasis is placed on mechanical drives, belts, gears, couplings, electrical drives, and other related topics. Upon completion, students should be able to demonstrate an understanding of industrial machines and be able to maintain this equipment.

MEC 161
Prerequisites:
Corequisites:

Manufacturing Processes I
None

This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.
$\begin{array}{lllll}\text { MEC } 180 & \text { Engineering Materials } & 2 & 3 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties.

MEC 210
Prerequisites:
Corequisites:

| Materials-Stress Analysis | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- |
| MAT 121 |  |  |  |
| None |  |  |  |

This course is a study of the principles and analysis of stress within machines and structural elements. Emphasis is placed on various types of loads including static, impact, varying, and dynamic loads. Upon completion, students should be able to demonstrate proficiency in analyzing stress in mechanical joints, welds, beams, and columns.

MEC 250
Prerequisites: Corequisites:

| Statics \& Strength of Mat | 4 | 3 | 5 |
| :--- | :--- | :--- | :--- |
| PHY 131 or PHY 151 |  |  |  |
| None |  |  |  |

This course covers the concepts and principles of statics and stress analysis. Topics include systems of forces on structures in equilibrium and analysis of stresses and strains on these components. Upon completion, students should be able to analyze forces and the results of stresses and strains on structural components.

## MEDICAL ASSISTING

MED 110
Prerequisites:
Corequisites:

Orientation to Med Assist
None

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

| MED 116 | Introduction to A \& P | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Medical Assisting program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course introduces basic anatomy and physiology. Emphasis is placed on the relationship between body structure and function and the procedures common to health care. Upon completion, students should be able to identify body system components and functions relating this knowledge to the delivery of health care.

| MED 118 | Medical Law and Ethics | 2 | 0 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |  |
| Corequisites: |  |  |  |  |  |

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

| MED 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |  |
| Corequisites: |  |  |  |  |  |

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

| MED 122 | Medical Terminology II | 3 | 0 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MED 121 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

| MED 130 | Admin Office Proc I | 1 | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Medical Assisting program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

| Class | Lab | Clin. | Credit |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 0 | 2 |

MED 131
Prerequisites:
Corequisites:

This course is the second in a series and provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

| MED 134 | Medical Transcription | 2 | 2 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MED 121 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides the basic knowledge, understanding, and skills required to complete medical reports and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competence in medical transcription.

| MED 140 | Exam Room Procedures I | 3 | 4 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Medical Assisting program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

| MED 150 | Laboratory Procedures I | 3 | 4 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Medical Assisting program |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

| MED 230 | Admin Office Proc III | 1 | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MED 131 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides advanced medical office administrative procedures. Emphasis is placed on management skills including personnel supervision, practice management, public relations, and insurance coding. Upon completion, students should be able to exhibit advanced managerial medical assisting skills.

| MED 240 | Exam Room Procedures II | 3 | 4 | 0 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MED 140 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competence in selected exam room procedures.

|  |  | Class | Lab | Clin. | Credit |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MED 250 | Laboratory Procedures II | 3 | 4 | 0 | 5 |
| Prerequisites: | MED 150 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course is designed to expand and build on skills presented in MED 150. Emphasis is placed on increasing proficiency in laboratory skills used in the medical setting. Upon completion, students should be able to demonstrate enhanced competence in selected medical laboratory procedures.

MED 260
Prerequisites: Corequisites:

MED Clinical Externship $0 \quad 0 \quad 15$ 5
Enrollment in the Medical Assisting program None

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

MED 270 Symptomatology $\begin{array}{lllll}2 & 2 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
Enrollment in the Medical Assisting program None

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

| MED 272 | Drug Therapy | 3 | 0 | 0 | 3 |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Prerequisites: | Enrollment in the Medical Assisting program | and | MED | 140 |  |
| Corequisites: | None |  |  |  |  |

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

## MARKETING AND RETAILING

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| MKT 120 | Principles of Marketing | 3 | 0 | 3 |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

| MKT 121 | Retailing | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: | Noner |  |  |  |

This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

MKT $123 \quad$ Cundamentals of Selling $\quad 3 \quad$ Labs |  | Credit |
| :---: | :---: | :---: |

Prerequisites:
Corequisites:
None
This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.
$\begin{array}{lllll}\text { MKT } 125 & \text { Buying and Merchandising } & 3 & 0 & 3\end{array}$
Prerequisites: Corequisites:

None
This course includes an analysis of the organization for buying-what, when and how to buy-and the principles of effective inventory and stock control. Topics include organization for buying, analysis of buyers' responsibilities, pricing, inventory control, planning, cost effectiveness, and vendor relationships. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT 220 Advertising and Sales Promotion 3
Prerequisites:
Corequisites:
None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

## MAINTENANCE

$\begin{array}{llllll}\text { MNT } 110 & \text { Intro to Maint Procedures } & 1 & 3 & 2\end{array}$
Prerequisites:
Corequisites:
None
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

| MNT 111 | Maintenance Practices | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MNT 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

MNT 150
Prerequisites: Corequisites:

Basic Building Maintenance
None

This course introduces the basic skills of building maintenance. Topics include basic carpentry and masonry skills including forming, framing, laying block to a line, repairing, and other related topics. Upon completion, students should be able to perform basic carpentry and masonry skills in a maintenance setting.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| MNT 220 | Rigging \& Moving | 1 | 3 | 2 |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the principles of safe rigging practices for handling, placing, and moving heavy machinery and equipment. Topics include safety estimation, positioning of equipment slings, rollers, jacks, levers, dollies, ropes, chains, padding, and other related topics. Upon completion, students should be able to relocate and set up equipment safely using accepted rigging practices.

| MNT 230 | Pumps \& Piping Systems | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course covers pump installation and maintenance and related valves and piping systems. Topics include various types of pump systems and their associated valves, piping requirements, and other related topics. Upon completion, students should be able to select and install pump and piping systems and demonstrate proper maintenance and troubleshooting procedures.

## MUSIC

| MUS 110 | Music Appreciation | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## NURSING ASSISTANT

| NAS 101 | Nursing Assistant I | 3 | 2 | 3 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | High school diploma or GED |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry. This is a certificate-level course.

| NAS 102 | Nursing Assistant II | 3 | 2 | 6 |
| :--- | :--- | :---: | :---: | :---: |
| Prerequisites: | High school diploma or GED and currently listed as NA I with State of |  |  |  |
|  | North Carolina |  |  |  |
| Corequisites: | None |  |  |  |

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing. This is a certificate-level course.

| Class | Lab | Clin. | Credit |
| :---: | :---: | :---: | :---: |
| 2 | 0 | 0 | 2 |

This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client's condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home. This is a certificate-level course.

NAS 104 Home Health Clinical $\quad 0 \quad 0 \quad 3 \quad 1$
Prerequisites: Corequisites:

None
This course provides supervised experience in the home and/or simulated laboratory with emphasis on the application of basic nursing skills. Emphasis is placed on the transfer of knowledge and skills from institutional settings to home environments. Upon completion, students should be able to safely and efficiently provide delegated basic care to clients in the home. This is a certificate-level course.

## NETWORKING TECHNOLOGY

| NET 110 | Data Comm/Networking | 2 | 2 | 3 |
| :--- | :--- | :---: | :---: | :---: |
| Prerequisites: | CIS 110 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduce data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.

## NURSING

NUR 115
Prerequisites:
Corequisites:

## Fundamentals of Nursing

CNAI Certification; Admission to the Associate Degree Nursing program None

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on the application of the nursing process to provide and manage care as a member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations of health.

| NUR 116 | Nursing of Older Adults | 2 | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | NUR 115, NUR 117, NUR 133 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides an opportunity to utilize the provider of care and manager of care roles to meet nursing needs of older adults in a variety of settings. Emphasis is placed on the aging process as it applies to normal developmental changes and alterations in health commonly occurring in the older adult. Upon completion, students should be able to apply the nursing process in caring for the older adult.

NUR 117
Prerequisites:
Corequisites:

Pharmacology $\quad$| Class | Lab | Clin. Credit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 3 | 0 | 2 |

Enrollment in ADN program
None
This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and application of the nursing process regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely.

| NUR 125 | Maternal-Child Nursing | 5 | 3 | 6 | 8 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | NUR 115, NUR 133, BIO 170, PSY 241 |  |  |  |  |  |
| Corequisites: | None |  |  |  |  |  |

This course introduces nursing concepts related to the delivery of nursing care for the expanding family. Emphasis is placed on utilizing the nursing process as a framework for managing/providing nursing care to individuals and families along the wellness-illness continuum. Upon completion, students should be able to utilize the nursing process to deliver nursing care to mothers, infants, children, and families.

| NUR 133 | Nursing Assessment | 2 | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | BIO 168, NUR 115 |  |  |  |  |
| Corequisites: | BIO 169 |  |  |  |  |

This course provides theory and application experience for performing nursing assessment of individuals across the life span. Emphasis is placed on interviewing and physical assessment techniques and documentation of findings appropriate for nursing. Upon completion, students should be able to complete a health history and perform a noninvasive physical assessment.

| NUR 135 | Adult Nursing I | 5 | 3 | 9 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | NUR 115, NUR 117, BIO 168, PSY 150 |  |  |  |  |
| Corequisites: | BIO 169, NUR 133 |  |  |  |  |

This course introduces concepts related to the nursing care of individuals experiencing acute and chronic alterations in health. Emphasis is placed on utilizing the nursing process as a framework for providing and managing nursing care to individuals along the wellness-illness continuum. Upon completion, students should be able to apply the nursing process to individuals experiencing acute and chronic alterations in health.

| NUR 185 | Mental Health Nursing | 3 | 0 | 6 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | NUR 115, NUR 117, PSY 281 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course includes concepts related to the nursing care of individuals experiencing alterations in social and psychological functioning. Emphasis is placed on utilizing the nursing process to provide and manage nursing care for individuals with common psychiatric disorders or mental health needs. Upon completion, students should be able to apply psychosocial theories in the nursing care of individuals with psychiatric/mental health needs.

| NUR 235 | Adult Nursing II | 4 | 3 | 15 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | NUR 135, BIO 170 |  |  |  |  |
| Corequisites: | None |  |  |  |  |

This course provides expanded concepts related to nursing care for individuals experiencing common complex alterations in health. Emphasis is placed on the nurse's role as a member of a multidisciplinary team and as a manager of care for a group of individuals. Upon completion, students should be able to provide comprehensive nursing care for groups of individuals with common complex alterations in health.

## OPERATIONS MANAGEMENT

## OMT 110 Intro to Operations Mgmt

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

Prerequisites: Corequisites:

None
This course provides an overview of the operations management field. Topics include production and operations planning, materials management, environmental health and safety, and quality management. Upon completion, students should be able to demonstrate an understanding of the operations management functions.

OMT 112 Materials Management $\begin{array}{llll}3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course covers the basic principles of materials management. Emphasis is placed on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

| OMT 143 | Just-In-Time | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: | Noser |  |  |  |

This course is a study of the quality philosophy and Just-in-Time techniques designed to improve the ability to economically respond to change. Topics include production to demand with perfect quality, no unnecessary lead times, elimination of waste, developing productivity of people, and the quest for continuous improvement. Upon completion, students should be able to demonstrate an understanding of Just-in-Time methods and be prepared for the APICS CPIM examination.

OMT 155 Meeting \& Present Skills 3
Prerequisites:
Corequisites: None
This course is designed to develop skills for facilitating successful meetings by enhancing employee involvement and initiative. Topics include planning meetings that promote results, encouraging diverse points of view, handling disruptive behavior, encouraging participation, and taking action when required. Upon completion, students should be able to plan and participate in meetings that accomplish positive results.

## OMT 245

Prerequisites:
Corequisites:

Master Planning
ISC 140
None

This course includes demand management, production planning, master production scheduling, and final assembly scheduling. Topics include forecasting, budgeting, aggregate output level, and order entry. Upon completion, students should be able to demonstrate an understanding of master planning and be prepared for the APICS CPIM examination.

Prerequisites:
Corequisites:

None

This course includes the planning and design of production systems and the selection of appropriate technology. Emphasis is placed on investigation into computerized production technology and appropriate systems to implement the technology. Upon completion, students should be able to demonstrate an understanding of production systems and technology and be prepared for the APICS CPIM examination.

| OMT 260 | Issues in Operations Mgt. | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |

This course presents a variety of topics that highlight contemporary problems and issues related to operations management. Emphasis is placed on production and operations planning, environmental health and safety, materials management, and quality systems. Upon completion, students should be able to demonstrate the ability to make decisions and resolve problems in an operations management environment. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.

## OFFICE SYSTEMS TECHNOLOGY

OST 080 Keyboarding Literacy $\quad 1 \quad 2 \quad 2$

Prerequisites:
Corequisites:

Keyboarding Literacy
None

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

| OST 131 | Keyboarding | 1 | 2 |
| :--- | :--- | :--- | :--- |$\quad 2$

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

| OST 134 | Text Entry \& Formatting | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | OST 131 |  |  |  |
| Corequisites: | None |  |  |  |

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents.

| OST 136 | Word Processing | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | OST 131, OST 134 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing enviroment.

OST 164
Prerequisites: Corequisites:

## Text Editing Applications

 None OST 131This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

| OST 181 | Intro to Office Systems | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | OST 131 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

| OST 184 | Records Management | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: | OST 131 |  |  |  |

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

OST 223 Machine Transcription I 1 | 2 | 2 |
| :--- | :--- | :--- |

Prerequisites: Corequisites:

OST 134, OST 136, and OST 164
None

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

OST 236
Prerequisites: Corequisites:

Adv Word/Information Proc 2203 OST 136
None

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

| OST 286 | Professional Development | 2 | 0 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

|  |  | Class | Lab | Credit |
| :--- | :--- | :--- | :---: | :---: | :---: |
| OST 289 | Office Systems Management | 2 | 2 | 3 |
| Prerequisites: | OST 134, OST 136, OST 164 and 181 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

## PHLEBOTOMY

| PBT 100 | Phlebotomy Technology | 5 | 2 | 0 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Phlebotomy Technology program |  |  |  |  |
| Corequisites: | PBT 101 |  |  |  |  |

This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. This is a certificate-level course.

| PBT 101 | Phlebotomy Practicum | 0 | 0 | 9 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | Enrollment in the Phlebotomy Technology program |  |  |  |  |
| Corequisites: | PBT 100 |  |  |  |  |

This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings. This is a certificate-level course.

## PHYSICAL EDUCATION

| PED 110 | Fit and Well for Life |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: |  |


| Class | Lab | Credit |
| :---: | :---: | :---: |
| 1 | 2 | 2 |

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

| PED 111 | Physical Fitness I | 0 | 3 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.

## PED 113

Prerequisites:
Corequisites:

| Class | Lab | Credit |
| :---: | :---: | :---: |
| 0 | 3 | 1 |

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

| PED 114 | Aerobics II | 0 | 3 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 113 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine.

| PED 117 | Weight Training I | 0 | 3 | 1 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites: None
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED 121 Walk, Jog, Run | 0 | 3 | 1 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities.

## PED 128

Prerequisites:
Corequisites:
Golf-Beginning $\quad 0 \quad 2 \quad 1$
None
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

| PED 129 | Golf-Intermediate | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 128 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf.

PED 130
Prerequisites:
Corequisites:

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

| PED 131 | Tennis-Intermediate | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 130 |  |  |  |
| Corequisites: | None |  |  |  |

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.
PED 132 Racquetball-Beginning $\quad 0 \quad 2 \quad 1$

Prerequisites:
Corequisites: None
This course introduces the fundamentals of racquetball. Emphasis is placed on rules, fundamentals, and strategies of beginning racquetball. Upon completion, students should be able to play recreational racquetball.

| PED 133 | Racquetball-Intermediate | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 132 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers more advanced racquetball techniques. Emphasis is placed on refining basic skills, performing advanced shots, and playing strategies for singles and doubles. Upon completion, students should be able to play competitive racquetball.

| PED 137 | Badminton | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations.

PED 139 Bowling-Beginning | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:

Bowling-Beginning
None

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling.

PED 142
Prerequisites:
Corequisites:

Lifetime Sports
$0 \quad 2 \quad 1$

None

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

PED 143
Prerequisites:
Corequisites:

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

| PED 144 | Volleyball-Intermediate | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 143 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball.

| PED 145 | Basketball-Beginning | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |  |
| Corequisites: |  |  |  |  |

This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball.

| PED 146 | Basketball-Intermediate | 0 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PED 145 |  |  |  |
| Corequisites: | None |  |  |  |

This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level.

## PHILOSOPHY

| PHI 215 | Philosophical Issues | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | ENG 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## PHYSICS

## PHY 131

Prerequisites:
Corequisites:

Physics-Mechanics
MAT 121 or MAT 161
None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 151
Prerequisites: Corequisites:

College Physics I
32
4 MAT 162, or MAT 175
None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

| PHY 152 | College Physics II | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PHY 151 |  |  |  |
| Corequisites: | None |  |  |  |

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

| PHY 251 | General Physics I | 3 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | MAT 271 |  |  |  |
| Corequisites: | MAT 272 |  |  |  |

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

PHY 252 General Physics II $\quad 3 \quad 3 \begin{array}{lll}4\end{array}$
Prerequisites: MAT 272 and PHY 251
Corequisites: None
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternatingcurrent circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## POLITICAL SCIENCE

POL 120
Prerequisites:
Corequisites:

American Government
None

## Class Lab Credit

303

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

POL 130
Prerequisites:
Corequisites:

State \& Local Government
None

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

## POL 210

Prerequisites:
Corequisites:

Comparative Government
None

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

POL 220 International Relations | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites: Corequisites:

International Relations
None

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

POL 240
Prerequisites:
Corequisites:

The American Presidency
None

This course provides an in-depth examination of the American presidency as the pivotal institution in American government and history. Emphasis is placed on the creation of the office, its constitutional powers and limitations, elections, and the leadership of selected presidents. Upon completion, students should be able to identify and explain the evolution of presidential powers and the reasons for successful and failed presidential leadership.

## PSYCHOLOGY

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| PSY 118 | Interpersonal Psychology | 3 | 0 | 3 |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.
PSY 150 General Psychology $\quad 3 \quad 0 \quad 3$

Prerequisites:
Corequisites:
None
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 241 Developmental Psych 3
$\begin{array}{ll}\text { Prerequisites: } & \text { PSY 150 } \\ \text { Corequisites: } & \text { None }\end{array}$

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 246
Prerequisites:
Corequisites:

Adolescent Psychology
PSY 150
None

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents.

PSY 255
Prerequisites:
Corequisites:

Intro to Exceptionality 3003
PSY 150
None

This course introduces the psychology of the exceptional person. Topics include theoretical perspectives, terminology, and interventions pertaining to various handicapping conditions as well as the resulting psychosocial adjustments. Upon completion, students should be able to demonstrate a basic understanding of the potentials and limitations of the exceptional person.

|  |  | Class | Lab | Credit |
| :--- | :--- | :---: | :---: | :---: |
| PSY 263 | Educational Psychology | 3 | 0 | 3 |
| Prerequisites: | PSY 150 |  |  |  |
| Corequisites: | None |  |  |  |

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.

| PSY 265 | Behavioral Modification | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisties: | PSY 150 |  |  |  |
| Corequisites: | None |  |  |  |

This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

| PSY 281 | Abnormal Psychology | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | PSY 150 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## READING

RED 080 Intro to College Reading $\quad 3 \quad 2 \quad 4$

Prerequisites:
Corequisites:
RED 070 or ENG 075 or Satisfactory Placement Test Scores None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. This course does not satisfy the developmental reading prerequisite for ENG 111.

RED 090
Prerequisites:
Corequisites:

Improved College Reading RED 080 or ENG 085
None

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. This course satisfies the developmental reading prerequisite for ENG 111.

## RELIGION

REL 110
Prerequisites:
Corequisites:

World Religions
None

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

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.

REL 211 Intro to Old Testament | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
Intro to Old Testament 3003
None

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

REL 212 Intro to New Testament $\begin{array}{llll}3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## SUBSTANCE ABUSE

SAB 130

## Addictive Behaviors

Prerequisites:
Corequisites:
None
This course surveys and investigates addiction patterns and various methods of treatment. Emphasis is placed on sociocultural, psychological, and physiological theories of substance abuse and treatment. Upon completion, students should be able to demonstrate an understanding of theories of substance abuse and treatment.

## SOCIOLOGY

SOC 210
Prerequisites:
Corequisites:
Introduction to Sociology

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

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in socialbehavioral sciences.

SOC 213
Prerequisites: Corequisites:

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

None
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.
$\begin{array}{lllll}\text { SOC } 220 & \text { Social Problems } & 3 & 0 & 3\end{array}$
Prerequisites:
Corequisites:
None
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## SOC 225

Social Diversity
303
Prerequisites:
Corequisites:
None
This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## SPANISH

SPA 111 Elementary Spanish I $\quad 3 \quad 0 \quad 3$
Prerequisites:
Corequisites: None
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

| SPA 112 | Elementary Spanish II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | SPA 111 |  |  |  |
| Corequisites: | None |  |  |  |

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SPA 211
Prerequisites:
Corequisites:

Intermediate Spanish I
SPA 112
None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

| SPA 212 | Intermediate Spanish II | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: | SPA 211 |  |  |  |
| Corequisites: | None |  |  |  |

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## WELDING

| WLD 110 | Cutting Processes | 1 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Prerequisites: |  |  |  |  |
| Corequisites: | None |  |  |  |

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.
WLD 111 Oxy-Fuel Welding $\quad 1 \quad 3 \quad 2$

Prerequisites:
Corequisites:

Oxy-Fuel Welding
None

This course introduces the oxy-fuel welding process. Topics include safety, proper equipment setup, and operation of oxy-fuel welding equipment with emphasis on bead application, profile, and discontinuities. Upon completion, students should be able to oxy-fuel weld fillets and grooves on plate and pipe in various positions.

WLD 112 Basic Welding Processes 1 | 1 | 3 | 2 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:
None
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.


Prerequisites: Corequisites:

None
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

Prerequisites:
Corequisites:

None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.
WLD 131 GTAW (TIG) Plate $\quad 2 \quad 6 \quad 4$

Prerequisites:
Corequisites:
None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion,
students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD 141 Symbols \& Specifications $\quad 2 \quad 2$
Prerequisites:
Corequisites:
None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 143 Welding Metallurgy $\quad 1$| 2 | 2 |
| :--- | :--- | :--- |

Prerequisites:
Corequisites:

Welding Metallurgy

None

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

## WLD 261

Prerequisites:
Corequisites:

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Certification Practices
WLD 115, WLD 121, and WLD 131
None
```

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

| WLD 262 | Inspection \& Testing | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |

Prerequisites:
Corequisites:
None

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

# Administration, Faculty and Staff 



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The Mitchell Community College Board of Trustees meets on the fourth Wednesday evening of each month except in November and December when the Board meets on the first Wednesday after Thanksgiving to avoid conflict with the Thanksgiving and Christmas Holidays. Also, generally, the Board does not meet in July. Meetings are routinely held at 7:30 p.m. in the Board Room of Kirkman House on the Main Campus in Statesville.

MCC Board of Trustees
Schedule of Meetings for 1997
January 22
February 26
March 26
April 23
May 28
June 25

## Administrative Offices

| Office of the President |  |
| :---: | :---: |
| Douglas O. Eason..................................................................................................... President |  |
| Margaret Grant | President |


| Office of the Vice-President For Instruction |  |
| :---: | :---: |
| rginia R. Mitchell....................................................................... Vice-President for Instruction |  |
| Sue Baker | Secretary to the Vice-President for Instruction |
| Mary Johnson | Alumni Services Coordinator |
| Donna Etherid |  |

## Office of the Dean of Curriculum Programs

John Karriker ........................................................................................ Dean of Curriculum Programs
Phyllis Mayberry .................................................... Secretary to the Dean of Curriculum Programs
Rebecca Sipes .............................................................Secretary, Nursing \& Health Care Programs
Karen Mayhew .....................................................................................Coordinator, Computer Lab

## Office of the Dean of Student Services

Billie A. Meeks Dean of Student Services Sarah Davis ..................................................................... Secretary to the Dean of Student Services Greg Stanley .............................................................................. Director of Admissions \& Records Jill Powell Financial Aid Director
Mary Lou Lawson Jewel CherryGinny Linder-SandiferWilliam JenningsKaren Krider .Barbara WaughJudy EricksonNancy Fields

Lisa Hutton

Lisa Hutton

$\qquad$
$\qquad$Secretary toto Director of Admissions \& RecordsAdmissions Secretary
Carolyn GrayAdmissions SecretaryRalph Hobbs
Counselor Assistant Carolyn MorrisonAdmissions Specialist/CounselorAdmissions Specialist
Counselor/Student Activities Coordinator
Career Center Director/Counselor
Assistant Financial Aid Officer/VA Coordinator
Student Records SpecialistFinancial Aid Specialist/Child Care
Evening Duty Coordinator
Office of the Dean of Continuing Education
William C. Findt Dean of Continuing Education
Gladys Fulcher Secretary
Cindy Wagner Computer Operations
Judy Hamilton Mooresville Center Extension Director
Secretary, Mooresville CenterMargaret Rankin
Hans Heymann Director of New and Expanding Industry and
Focused Industrial Training
Carol Johnson Director of Basic Skills
Sherry Clarke Basic Skills Instructional CoordinatorLavida HarrisCandy Kegarise
Learning Lab Coordinator
Assessment/Retention Specialist
HRD/JTPA Coordinator
Charles Putnam
Linda Schade ..... Secretary
Peggy Murdock HRD/JTPA Secretary
Rick Kimrey Regional Coordinator, Business \& Industry Services
Debra PfeilCoordinator of Allied Health Programs
Diane Pritchard Director, Community Services/Occupational Extension
Jaye Lippard ..... Secretary
Sandy Hinz Coordinator of Community Services Programs
Bill Vortriede Director of North Carolina Rider Education
Bob Brown ..... Communications Specialist
Traci Thomas
Small Business Center Director
Bernard Robertson Director of Evening Program
Learning Resources Center
Rex Klett Director of Learning Resources
Vicki Caldwell Instructional Technology Coordinator
Scott Testerman Computer \& Information Highway Technology Coordinator
Laverne Sloan AV Services Technician
Bonzia Terrell Library Technician
Office of the Vice-President for Finance and Administration
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Ellen Bedore Secretary to the Vice-President for Finance and Administration
Barbara WheelerController
Gary Johnson Director of Facilities and Auxiliary Services
Karen Furr ..... Budget Analyst
Carol Setzer ..... Payroll Officer
Jane Abernethy Cashier/Accounts Payable Officer
Rachel Knox Accounting TechnicianMarie PratherSystems Administrator
Joyce Roseberry Assistant Systems Administrator/Accounts Payable Officer
Jerry Sloan Purchasing Officer/Equipment Coordinator
Donna ArnettManager of Bookstore
Sandra Dunn Administrative Specialist
Michael Brown Facilities Support Services Supervisor
Terry Braddock ..... Custodian
Teresa Davis ..... Custodian
Mary Ann Johnson ..... Custodian
Robert Johnson ..... Custodian
Martha Lambert Custodian
Kenny McCorkle Custodian
Velva Stevenson Custodian
Frederick Strang Custodian
Boyce Tucker Custodian
Paul Williams ..... Custodian
Roy Wilson Custodian

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B.A. University of North Carolina; M.Ed. University of South CarolinaBiology
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B.S. Livingstone College; M.P.A. State University of New York at Albany
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B.S. Winthrop College; M.B.A. Winthrop College; Certified Public Accountant

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Mitchell Community College 500 West Broad Street

Statesville, North Carolina 28677
Phone 704-878-3200
Fax 704-878-0872

Mitchell Community College


[^0]:    **Any student who has completed the Basic Law Enforcement Training Program (BLET) can receive 13 SHC in the Criminal Justice Program for the following courses:

