In compliance with federal law, including the provisions of Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, Johnston Community College does not practice or condone discrimination in any form against students or employees on the basis of race, color, age, sex, national origin, religion, disability, or covered veteran status in its administration of education policies; scholarship and loan programs; or employment. Inquiries or complaints should be addressed to the vice president of student services and/or the vice president of administrative services.

AN EQUAL OPPORTUNITY INSTITUTION
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MESSAGE FROM THE PRESIDENT

When compared to 2009, forty years ago was a very different time in history! However, it was a very exciting time. For example, in 1969 the first human walked on the moon, Boeing 747 made its first commercial flight, gold reached a record high ($47 per ounce), the Internet was born, the first human eye transplant was performed, Walt Disney World construction began, Woodstock rock festival was held, the first automatic teller machine in the United States was installed, “Sesame Street” premiered on PBS TV, Wendy’s Hamburgers opened, the Jackson Five made their first appearance on the “Ed Sullivan Show” and Johnston County Technical Institute enrolled its first 500 students. Since 1969, space travel has become commonplace, the Internet a necessity for business and education, and Johnston Community College enrolls over 20,000 students per year.

A lot has happened over the past 40 years. JCC has grown to be the 16th largest college of the 58 in North Carolina and has served well over 500,000 students in outstanding education programs. Even over the past year since the last catalog was published, JCC has opened a new Health Sciences building and started construction on a 34,000-square foot Learning Resource Center.

While the catalog is not intended as an historical reference, you will find it an interesting representation of where we have been over the past 40 years and where we are as an institution of higher education in 2010. Updated information from every aspect of the College can be found throughout this document. I recommend it to you. With proper use, I feel certain it will assist you in getting the most from your JCC experience. And to that regard, I wish you well in your educational endeavors. JCC is your college. I hope this catalog will help you take full advantage of all we have to offer!

David N. Johnson, Ed.D.
President
Johnston Community College

PURPOSE OF THE CATALOG

Johnston Community College publishes this catalog to provide prospective and current students, public citizens, business and corporate entities, agencies, and other interested organizations and persons with information about the College, its programs, and services.

The information provided herein is current and up-to-date as of January 2010 and as accurate as possible.

The provisions stated in this catalog are not to be regarded as an irrevocable contract between students or other citizens and Johnston Community College or any College division or unit or within the state of North Carolina.

The College reserves the right and responsibility to change or replace any provisions, requirements, fees, schedules, or other information at any time or to add or withdraw courses, program offerings, or listed services as may be necessary. Every effort will continue to be made to minimize any and all inconveniences or disruptions that any such changes or replacements may cause to students or to members of the public.

Students having questions not addressed or satisfactorily answered by this catalog may receive additional information from the respective department chair, academic advisor, or other professional staff members in Student Services, Curriculum Programs, and Continuing Education.

Changes subsequent to the publication of the catalog are posted on our College Web site: www.johnstoncc.edu. A copy of this catalog in PDF format is also available on the College Web site.
CONTACT INFORMATION

MAIN TELEPHONE NUMBER
Receptionist ................................................. 934-3051

STUDENT SERVICES
Admissions Information .................................. 209-2128
Counseling .................................................. 209-2128
Director of Admissions .................................. 209-2079
Disabilities Counselor .................................... 209-2543
TTY .............................................................. 209-2154
Financial Aid ............................................... 209-2036
JobLink Career Center ................................... 209-2094
Job Placement .............................................. 209-2094
Records and Transcripts .................................. 209-2018
Registrar ...................................................... 209-2017
Student Activities/Athletics Director ............... 209-2123
Student Recruitment Coordinator .................. 209-2201
Student Support Services (TRIO) ..................... 209-2075
Veterans Affairs .......................................... 209-2055
Vice President, Student Services ...................... 209-2048

CURRICULUM
Academic Enrichment Services .......................... 209-2117
  Academic Skills Center ................................ 209-2117
  Center for Academic Planning ....................... 464-2261
  The Tutoring and Writing Center .................... 464-2353
Applied Industrial Technology ......................... 209-2163
Arts and Sciences ........................................ 209-2040
Business/Computer Technology ....................... 209-2041
Health Sciences .......................................... 209-2024
Vice President, Curriculum Instruction .............. 209-2066

CONTINUING EDUCATION
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Business and Industry Services ...................... 209-2082
Certified Nursing Assistance (CNA) and
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Computer Applications and Distance Learning .... 209-2108
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Fire and Rescue Training ............................... 209-2081
GED ........................................................... 209-2003
Health and Emergency Services Program .......... 209-2012
HRD Program ............................................. 209-2592
In-Service Law Enforcement Training ................ 209-2514
JobsNow Allied Health Coordinator ................. 209-2521
Literacy Assessment Coordinator .................... 209-2003
Real Estate Training .................................... 209-2042
Small Business Center .................................. 209-2015
Vice President, Continuing Education ............. 209-2071

INFORMATION TECHNOLOGY
Instructional Technology &
  Distance Education Center ............................ 464-2260
Library ...................................................... 209-2101
Vice President, Information Technology .......... 209-2000

ADMINISTRATION
Accounts Payable ......................................... 209-2016
Accounts Receivable ..................................... 209-2136
Applied Industrial Technology ......................... 209-2163
Assistant Controller ..................................... 209-2098
Business Office ........................................... 209-2043
Cashier ....................................................... 209-2165
College Bookstore ....................................... 209-2104
College Foundation ..................................... 209-2119
Controller .................................................. 209-2070
Human Resources/Employment Office .............. 209-2025
Institutional Effectiveness .............................. 209-2106
Office of the President .................................. 209-2011
Payroll ....................................................... 209-2014
Purchasing/Equipment Coordinator ................. 209-2007
Shipping and Receiving ................................. 209-2167
Vice President, Administrative Services .......... 209-2051

INSTITUTIONAL ADVANCEMENT
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Advertising .................................................. 209-2100
Media Relations .......................................... 209-2563
Vice President, Institutional Advancement
  and Effectiveness ..................................... 209-2106

OUTREACH/OFF-CAMPUS
Arboretum .................................................. 209-2052
  1240 E. Market Street, Smithfield 27577
Cleveland Center ........................................ 989-2128
  9046 Cleveland Road, Clayton 27520
Kenly Center .............................................. 284-1504
  408 S. College Avenue, Kenly 27542
Benson Center ............................................ 314 S. Lee Street, Benson 27504
Performing Arts/Auditorium ............................ 209-2052
  245 College Road, Smithfield 27577
     Box Office ............................................ 209-2099
     Auditorium Director ................................. 209-2112
Rudolph Howell & Son .................................
Environmental Learning Center ....................... 938-0115
  6601 Devil’s Racetrack Road, Four Oaks 27524
Workforce Development Center ..................... 209-2591
  135 Bestwood Drive, Clayton 27520
     Bio-Academy Coordinator Biowork ............ 209-2593
     Bioprocess Technology ......................... 209-2224
FALL SEMESTER, 2010

August 9 & 10: On-Campus Advising and Registration
August 11 & 12: Faculty Planning Days
August 13: Last Day for 100% Refund
August 16: Classes Begin
August 17: Last Day for Adding Courses
August 25: Last Day to Drop for 75% Refund
September 6: Labor Day Holiday
October 11 & 12: Faculty Development Days
October 11-15: Fall Break for Students
November 1-23: Advising for Spring – New & Returning Students
November 10-23: Spring Registration – Telephone and Web
November 15: Last Day to Drop Without Grade Penalty
November 25 & 26: Thanksgiving Holidays
November 30: Last Day to Pay for Registration
December 13: Last Day of Classes and Exams
December 14 by 10 AM: Grades Due

SPRING SEMESTER, 2011

January 4: Faculty Development Day
January 5: On-Campus Advising and Registration
January 6: Faculty Development Day
January 6: Last Day for 100% Refund
January 7: Classes Begin
January 11: Last Day for Adding Courses
January 17: Martin Luther King Holiday
January 19: Last Day to Drop for 75% Refund
March 7-11: Spring Break
March 14–July 19: Advising for Fall – New & Returning Students
April 22: Easter Holiday
April 8: Last Day to Drop Without Grade Penalty
May 9: Last Day of Classes and Exams
May 10 by 10 AM: Grades Due
May 16: Graduation – Diploma & Associate Degree
ACADEMIC CALENDAR, 2010–2011

TEN-WEEK SUMMER SESSION, 2011

May 9
Four Day Work Week Begins
May 17
On-Campus Advising and Registration
May 18
Last Day for 100% Refund
May 19
Classes Begin
May 23
Last Day for Adding Courses
May 25
Last Day to Drop for 75% Refund
July 4
Fourth of July Holiday
July 5-21
Fall Payments Due
July 12
Last Day to Drop Without Grade Penalty
July 21
Last Day to Pay for Registration
July 27
Last Day of Classes and Exams
July 28 by 10 AM
Grades Due
August 1
Last Four Day Work Week
August 11
Graduation – Certificate, GED, & Adult High School

Approved 10/08
Revised 10/09
ABOUT THE COLLEGE

HISTORY

Johnston Community College has been awarding associate’s degrees, certificates, and diplomas for 40 years to students pursuing occupational, technical, and continuing education skills.

With a curriculum enrollment of some 6,000 students and continuing education enrollment of an estimated 14,000 students per year, JCC ranks among the top twenty largest community colleges in North Carolina. During its 40-year history, JCC has maintained its small town values while progressively meeting the needs of one of the fastest growing counties in the state.

In September 1969, Johnston County Technical Institute was established as the fifty-first school of its kind in the state. The first campus opened in a former high school in Four Oaks under the leadership of Dr. John Tart, founding president. The College moved to its current location in Smithfield in 1976 gaining full accreditation from the Southern Association of Colleges and Schools the following year.

In 1980, the school was renamed to Johnston Technical College, and in 1987 became Johnston Community College. JCC witnessed tremendous progress under Dr. Tart’s direction, including the construction of a 1,000-seat performing arts auditorium through a private fundraising campaign and the launch of the college transfer program. After Dr. Tart’s retirement in 1999, Dr. Donald L. Reichard was selected to lead the College into the new millennium. During Dr. Reichard’s tenure, JCC focused on expanded opportunities for global education, diversity, biotechnology training, and innovative learning. Dr. Reichard retired in June 2009 and Dr. David N. Johnson, a Raleigh native, was selected as JCC’s third president.

JCC is located 30 miles east of Raleigh near the junction of Interstate 95 and U.S. Highway 70 Business. Today, the two-year post-secondary college offers 58 occupational programs of study as well as numerous continuing education programs and community service activities on its 177-acre main campus. The College boasts state-of-the-art facilities and has educational centers throughout the county, including the Workforce Development Center in Clayton, a biosciences training center that houses classrooms and computer and science labs, the Howell Woods Environmental Learning Center, a 2800-acre wildlife preserve and teaching facility, as well as continuing education centers in Benson, Cleveland, and Kenly. The College’s main campus is also home to a teaching arboretum, the Paul A. Johnston Auditorium, and the North Carolina Truck Driver Training School, the oldest truck driver training school in the United States.

JCC has witnessed steady enrollment growth over the past decade. Four bond approvals since 1999 have allowed for the construction and renovation of numerous buildings on the JCC campus, including the construction of the Roger A. Smith Building for physical education classes, the construction of the William R. Britt Building, which houses the industrial technology programs, and most recently the construction of the Public Safety Services Building, which houses certified nursing assistant, emergency medical services, fire science, law enforcement and other public service training programs. In fall 2009, an addition to the Health Sciences Building opened, creating more classrooms and specialized labs for health sciences programs, and the construction of a new library, which will be the College’s first environmentally certified building, began.

CAMPUS

The main campus of Johnston Community College is located near the center of Johnston County, North Carolina, near the intersection of Interstate 95 and US Business 70, at 245 College Road in Smithfield. While the College has its beginnings in 1969, classes began at the new Smithfield campus in September 1976.

The 175-acre campus of buildings and designated sites includes classroom and lab spaces and facilities for both curriculum and continuing education programs as well as the library, greenhouses, fitness center, art gallery, academic skills center, student lounge, auditorium, faculty offices, administrative and student support offices, and service spaces. The beautiful and luscious campus site includes scenic ponds, fountains, walking trails, thematic gardens, and courtyards through an array of native species plants and cultivated landscapes.

Buildings on Campus

Arboretum Complex

The 16 acres of the Arboretum Complex incorporates several facilities and spaces including a one-mile public walking trail, various thematic gardens and a courtyard, plus a classroom building and greenhouses utilized primarily by students in the Landscape Gardening program. Public functions are also held in these various facilities and the Arboretum offices are in the modular unit within the Arboretum Complex. The Arboretum promotes prudent and responsible use of cultivated plants and conservation of native species through the acquisition, evaluation, and aesthetic display of selected plant materials. This is accomplished in an educational environment for students, visitors, the green industry, and local citizens. The first beds were planted in 1996 and the site continues to be developed and enhanced.

Arts Building

Built in 1987, the Arts Building is home to the College’s art, music, advertising and graphic design programs. The 29,000-square-foot building also houses the Network Services Department of information technology. The building was most recently renovated in 2006.
Britt Building
Named for the late William R. (Billy) Britt, a Smithfield attorney and longtime member of the College’s Board of Trustees and member of the North Carolina Legislature, the Britt Building opened in the fall of 2004. The 28,000-square-foot facility houses several Applied Industrial Technology programs including welding, machining technology, and air conditioning, heating, and refrigeration technology. The building also includes faculty offices and a welding lab, machine shop, and carpentry shop for student use.

Elsee Building
Named for the late Walter B. Elsee, a former member of the College’s Board of Trustees, and honored by the College Foundation as Distinguished Citizen, the building was constructed in 1978. Major portions of the building were renovated in 2006. The Basic Skills program, Adult Basic Education, General Educational Development (GED), and Adult High School are located in the 20,000-square-foot Elsee Building. The Compensatory Education program is housed in a modular unit adjacent to Elsee that may be accessed via JCC-Lakeside Drive. Other continuing education programs and offerings are held at the College’s off-campus centers, the Public Safety Services Building, and additional community sites.

Health Sciences Building
Constructed in 1998, the two-story Health Sciences Building is home to various health sciences and early childhood programs. The 38,000-square-foot building includes classroom, lab, and computer space for biology, nursing, medical assisting, medical imaging, therapeutic massage, esthetics, and early childhood education programs. The facility also has a five-star rated Child Development Center, which serves students, faculty, staff, and the public. In fall 2009, a 28,000-square-foot, $7 million addition to the Health Sciences Building opened featuring additional classrooms, health and natural science labs, and a therapeutic massage spa.

Public Safety Services Complex
The 18 acres of this Public Safety Services Complex includes the new 27,000-square-foot Public Safety Services Building which opened in early 2008. The Public Safety Services Building houses the certified nursing assistant, emergency services, fire science, law enforcement, and other public services training programs. The Public Safety Services Complex also includes the Fire & Rescue Training Grounds, complete with outdoor training apparatus and various physical structures and units to train and practice fire simulations and search and rescue scenarios. This area has served as a Johnston County fire and rescue training grounds since 1998.

Smith Building
The Smith Building, which opened in 2003, is named after Roger A. Smith, a Goldsboro farmer, insurance business owner, and landowner who died in 1973. Smith’s son, William, gifted some 40 acres to the College in his father’s memory in 1993. The 28,000-square-foot building houses college transfer classes, such as history, English, mathematics, psychology, sociology, and physical education, as well as a fitness center.

Tart Building
The Tart Building is named for the founding president of Johnston Community College, John L. Tart, who was also a member of the North Carolina Legislature, and served from 1969 until his retirement in 1998. The 51,000-square-foot Tart Building includes a public-use auditorium, the College Library, distance learning classrooms and classroom space for various academic programs as well as the ticket office and the Great Hall used for a variety of college and public functions. The 1,000-seat Paul A. Johnston Auditorium enables the College to showcase major performing arts programs and serves as the site for many local and regional events, such as recitals, pageants, band concerts, lectures, and other special community events. The College Library contains 31,000 books in its general, special, and reference collections and subscribes to numerous online databases accessible in its computer center.

Transport Technology Building
Constructed in 1982, the 16,000-square-foot Transport Technology Building is home to the North Carolina Truck Driver Training School, the oldest truck driver training school in the United States. In addition to classrooms and office space for the TDT program, the building, which most recently underwent renovation in 2005, also includes classrooms for the Heavy Equipment and Transport Technology program.

Wilson Building
Originally constructed in 1976, the Wilson Building was named for the late M. Brack Wilson Sr., the first chair and a member of the College’s Board of Trustees. As the first main building on the campus, the Wilson Building has experienced two renovations and a major addition since 2005. Now with 64,000-square-feet, the Wilson Building is the largest structure on the campus and is readily visible with the large, four-faced street clock and flag poles near the main entrance. The first floor of the two-story building houses many administrative services, student and public-use functions, and administrative offices, along with the Cosmetology program. The second floor houses faculty offices, classrooms, and computer labs.

Other Campus Buildings and Sites
Sports & Recreation Complex
This 14-acre property currently includes a softball field and outdoor volleyball courts, as well as open fields for intramural and student-sponsored field games such as soccer.
Sanders Building
Named after Gabriel “Gabe” Sanders, the first employee to retire from the College, who was honored by the Board of Trustees for his dedicated service as an employee. Built in 1995, the 13,000-square-foot building includes a maintenance shop, a construction area for the residential construction classes, and storage for grounds and surplus equipment.

Lakeside Greenhouses
Two greenhouses on campus are used by students in the greenhouse program, a project sponsored in cooperation with the Johnston County Mental Health Center. The program provides job training in greenhouse and grounds maintenance for mental health clients. Various seasonal plants – bedding plants, mums, pansies, poinsettias – are grown inside the greenhouse and sold throughout the year to the public.

Off-Campus Centers
Cleveland Center
The Cleveland Center is located on N.C. Highway 1010 about 15 miles west of the main campus. The 7,000-square-foot building offers numerous community service, computer, occupational training, and adult basic education courses.

Rudolph Howell & Son Environmental Learning Center – Howell Woods
Howell Woods, located approximately 15 miles southeast of the main campus on Devil’s Racetrack Road, consists of 2,850 acres of pristine hardwood, pine forest, and wetlands. Howell Woods provides a facility for workshops, seminars, and classes.

Workforce Development Center
The Workforce Development Center, located on Bestwood Drive in Clayton, is a 30,000-square-foot educational and technical skills training center. The center offers courses in life sciences programming and business training as well as workforce development in biotechnology and other sciences.

2008-2013 EXPANDED STATEMENT OF PURPOSE
Preamble
Johnston Community College (JCC) in Smithfield, North Carolina, is located thirty miles east of Raleigh near the junction of I-95 and US 70. The 175-acre main campus boasts state-of-the-art facilities, picturesque pines, colorful azaleas and scenic ponds. Johnston Community College has campuses throughout the county, including the Cleveland Center, the Workforce Development Center in Clayton, and the Howell Woods Environmental Learning Center, a 2800 acre wildlife preserve and teaching facility.

Originally established in 1969 in Four Oaks, North Carolina, and moved to its current location in 1976, JCC has maintained its small town values while progressively meeting the needs of the fastest growing county in North Carolina.

The College was fully accredited in 1977. As a member of the North Carolina Community College System, it is a public, two-year post-secondary college with an open-door admission policy.

Johnston Community College provides comprehensive occupational, general, and continuing education programs, as well as community service activities for Johnston County and surrounding areas. The College opens its doors to the community and seeks to provide for the fullest possible development of the potential of all students in order that they may increase their knowledge and understanding of life; that they may develop occupational and educational proficiencies in accordance with their interests, talents, and aspirations; and that they may continue their personal growth. To that end, the College, in its programs, services and future plans, strives to reflect the unique demographic, economic and culturally diverse area it serves.

Mission Statement
Effective July 2010
The mission of Johnston Community College is to provide readily accessible, high quality educational opportunities that prepare students for local and global opportunities for the twenty-first century in a safe and inclusive environment.

INSTITUTIONAL GOALS
1. To support student achievement of academic goals, career-related goals, enhanced employment opportunities, or transfer to four-year colleges.
2. To collaborate with appropriate agencies and groups to meet workforce and community needs.
3. To ensure high quality and continuous improvement in all programs and services.
4. To provide structured leadership training to ensure future institutional leadership.
5. To value the diversity and achievements of faculty, staff, and the student body.
6. To provide and support cultural enrichment, outreach, and community based programs, activities, and events.
7. To create, maintain, and enhance an environment conducive to learning.
8. To ensure the efficient, appropriate, and effective use of all available resources.
9. To expand alternative sources of funding.
10. To engage in strategic planning, recurring evaluation, and responsiveness to community needs.
STRATEGIC AREAS OF EMPHASIS

1. Enhancement of safety and security for all campus locations.
2. Development of environmentally conscious initiatives for the campus.
3. Pursuit of supplemental funding.

2007 - 2008 PERFORMANCE MEASURES RESULTS

Reported in 2009 Critical Success Factors

In February 1999, the North Carolina State Board of Community Colleges (NCSBCC) adopted 12 performance measures for accountability. These measures are one component of the Critical Success Factors Report, the major accountability document for the North Carolina Community College System. The performance measures focus primarily on student success and serve as a major public accountability tool for individual community colleges. In a 2007 effort to streamline and simplify accountability reporting, the General Assembly approved modifications to the these measures, which were, in turn, adopted by the NCSBCC. As a result, the number of performance measures was reduced to eight.

Each performance measure begins with a description/definition, the standard that must be achieved, and the College’s performance for that measure. Additional information related to these measures can be obtained through the College’s Institutional Advancement and Effectiveness Office.

1. Progress of Basic Skills Students.
   Basic skills students include all adult literacy students.
   Progress of basic skills students is a composite measure that includes the percent of students progressing within a level of literacy, the percent of students completing a level entered or a predetermined goal, and the percent of students completing the level entered and advancing to a higher level. The standard for progress is 75 percent for the adjusted composite measure. Johnston Community College’s performance was 76 percent.

   This measure reports the percentage of first-time test takers from Johnston Community College passing an examination required for North Carolina licensure or certification prior to practicing the profession. There are two standards that must be met for this measure: the aggregate institutional passing rate of 80 percent and the minimum accepted performance on any single reported examination of 70 percent. Johnston Community College’s aggregate institutional passing rate was 92 percent.
   Scores for specific programs are as follows: Basic Law Enforcement Training – 96 percent; Cosmetology – number of test takers too small to report without violating students’ privacy; Esthetician – number of test takers too small to report without violating students’ privacy; Emergency Medical Technician (EMT) – 83 percent, EMT-no...test takers, EMT-P – 92 percent; Real Estate – number of test takers too small to report without violating students’ privacy; Radiography – 100 percent; Nuclear Medicine Technology – number of test takers too small to report without violating students’ privacy; Nursing - Practical – 100 percent, Registered – 100 percent.

   The purpose of this measure is to compare the performance of Johnston Community College’s associate degree students (Associate in Arts, Associate in Science, and Associate in Fine Arts) who transfer to public North Carolina universities with students native to the four-year institutions. There are two standards that must be met for this measure. The first cohort analysis compares the performance of the Johnston Community College transfer degree recipients after two semesters at the public university to the performance of native juniors. The second cohort analysis compares the performance of the Johnston Community College transfer students who complete at least 24 semester hours or more of college transfer courses at Johnston Community College (but not completing the degree) to the performance of native sophomores. Both standards require that at least 83 percent of the students (an aggregate of the two categories) achieve a grade point average (GPA) of 2.0 or higher after two semesters at a UNC institution. Johnston Community College students’ performance on the first cohort was 87 percent in 2006-2007. The percentage on the second standard was 82 percent in 2006-2007. When combining the two standards, the aggregate was 85 percent for 2006-2007.

4. Satisfaction of Program Completers and Non-Completers.
   This measure reports the proportion of graduates and early leavers who indicate that the quality of the college programs and services met or exceeded their expectations. The standard is that 90 percent of the combined respondents will report being satisfied with the quality of Johnston Community College’s programs and services. Ninety-eight percent of the combined respondents reported being satisfied with the quality of the College’s programs and services.

5. Passing Rates of Students in Developmental Courses.
   This measure reports the percent of students who complete developmental English, mathematics, and reading courses with a grade of “C” or better. The standard requires that 75 percent of students who complete a developmental course will have a grade of “C” or better for that course. Johnston Community College students taking a developmental course completed the course with a grade of “C” or better at the percentages indicated for reading, 88 percent.

6. Curriculum Student Retention and Graduation.
   This composite measure consists of the number of
individuals completing a curriculum program with a certificate, diploma, or degree and the number of individuals who have not completed a program but who are continuing enrollment in either curriculum or occupational extension programs. The performance standard for this measure stipulates that 65 percent of the defined fall student population will have completed their program, still be enrolled the following fall at Johnston Community College, or have transferred to another community college or university. Seventy-three percent of Johnston Community College students either graduated or are still enrolled at the college.

7. **Client Satisfaction with Customized Training.**
This measure is intended to determine the satisfaction of organizations that received services from Johnston Community College. The performance standard for this measure is that 90 percent of businesses/industries surveyed will report satisfaction with the services provided by Johnston Community College. Ninety-eight percent responded that they were satisfied with the customized training provided by Johnston Community College.

8. **Success Rate of Developmental Students in Subsequent College-Level Courses.**
The purpose of this measure is to provide evidence that developmental courses equip students with the skills and knowledge necessary for success in their subsequent college studies. The performance standard for this measure is that 80% of students who completed a developmental course in 2005-6 and completed subsequent a designated college level course in 2006-7 will have a passing grade for the college level course. The data for this measure indicates that 97 percent of the students who completed a developmental course(s) had a grade of “C” or better in the subsequent college-level course in 2007-8.

**GOVERNANCE**

**State Board of Community Colleges**

The State Board of Community Colleges is responsible for the North Carolina Community College System and its 58 institutions. The 21 members of the State Board are selected by the governor and the General Assembly, and the lieutenant governor and state treasurer serve as ex-officio members along with the president of the Community College Student Government Association. The State Board has three functions: (1) assure equitable distribution of funds and fiscal accountability; (2) establish state regulations; and (3) provide educational program approval and accountability. By law, the State Board is responsible for providing funds to meet the financial needs of the community colleges.

The North Carolina Community System Office provides support services for the program and service offerings of the 58 community colleges, and assists in developing curricula and statewide data collection.

**Board of Trustees**

Johnston Community College operates under the control of a 12-member local Board of Trustees. Each member serves a four-year term, with four members elected by the Johnston County School Board, four members chosen by the Johnston County Board of Commissioners, and four members appointed by the Governor. The president of the Student Government Association serves as an ex-officio member. The Board of Trustees sets all local policy and the Board appoints the College President. In addition, the Board of Trustees has authority to disperse funds as delegated by the State Board. The Board meets bimonthly in public and executive sessions.

**College President**

The president operates and leads the College within state regulations and according to policies adopted by the Board of Trustees. All administrative decisions, such as faculty/staff employment, are made by the president, and all personnel are College employees. Dr. David N. Johnson became president in July 2009.

**Sources of Funds**

The College receives funds from five sources: state allocations, tuition/fee revenues, Johnston County, federal government, and private support. State funds are allocated to the community colleges based on a formula comprised of the average number of full-time equivalent (FTE) enrollments for the year, by direct appropriation, or in response to requests for proposals. The formula varies by degree, certificate, Continuing Education, and extension programs. Some programs, like community service and summer classes, are considered self-supported offerings.

**ACCREDITATIONS / APPROVALS**

Johnston Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the certificate, diploma, and associate degree.

In addition to the SACS accreditation, Johnston Community College is accredited or approved by the following:

- Commission on Accreditation of Allied Health Education Programs in Medical Assisting
- Division of Facility Services: Nurse Aide Registry
- Joint Review Committee on Accreditation of Nuclear Medicine Technology Program (pending)
- Joint Review Committee on Education in Diagnostic Medical Sonography
- Joint Review Committee on Education in Radiologic Technology
- National Association for the Education of Young Children – Child Development Center
- National Certification Board for Therapeutic Massage & Bodywork
• North Carolina Criminal Justice Education and Training Standards Commission - BLET
• North Carolina State Board of Cosmetic Arts
• North Carolina State Board of Nursing

Johnston Community College is an approved teaching site through the North Carolina Office of EMS and is recognized as a training center for the American Heart Association. The College is also an approved teaching site for Pre-Hospital Trauma Life Support through the National Association of EMT.

COLLEGE FOUNDATION – GIVING OPPORTUNITIES

The College Foundation is established and operated as a tax-exempt nonprofit corporation subject to the provision of Section 501(c)(3) of the Internal Revenue Code and G. S. 55A-1-01 et seq. of the laws of the State of North Carolina. The College Foundation exists as per the authority of the Board of Trustees of Johnston Community College, which established the College Foundation in 1982. It is administered by an independent Board of Directors, community citizens who serve voluntarily and without compensation.

Board of Directors

The College Foundation and its 35-member Board of Directors, including one student member, work with the College president, vice presidents, and resource development professionals to coordinate private giving to the College—identifying, receiving, and managing gifts, bequests, and financial resources from private and corporate sources. The Foundation is a well-established, viable, and secure nonprofit organization serving current, past, and future students; faculty and staff; and indeed the entire community.

Steered by dedicated business, civic, and public leaders, the College Foundation provides a means for local and regional community-based citizens to take an active role in promoting the future of Johnston Community College and assuring its continued success.

Purpose

The purpose of the Foundation is to promote and develop public gift support for Johnston Community College through solicitation of private gift contributions and the prudent management and investment of such gifts for enhancement and advancement of the College, its programs and activities, and for student educational loans, scholarships, and grants.

The College Foundation values honesty and integrity in its relationships with the College, donors, and the community. The College Foundation will provide a portfolio of giving opportunities within a framework that respects the desires and charitable choices and preferences of our donors, including Named Endowment Funds and Named Annual Scholarship Funds, Special Purpose Funds and General Purpose Funds. The College Foundation provides assistance to prospective donors through a comprehensive program of tax-wise gift alternatives through planned giving and estate planning, while respecting the professional legal and fiscal counsel representing each donor.

Assets/Giving

Current investment assets of the Foundation are at $4.3 million, with over 135 endowed and annual scholarships, as well as 39 Special Purpose Funds that direct resources to support and advance various initiatives—e.g., Arboretum, Howell Woods, Performing Arts, Workforce Development Center, Art Gallery, student leadership, Library, academic enrichment, and emergency student assistance, to name a few.

While supported publicly, the state does not provide funds for start-up of new programs, monies to purchase high-tech equipment, or dollars to support targeted opportunities or respond to creative and progressive teaching initiatives. The College must seek private gifts and donor support to maintain and expand desired programs and services—and provide scholarship assistance. And as a public community college, the historical underfunding will continue as greater numbers of students, especially part-time adult students, further tax the College’s service and support resources.

For a listing of current Foundation scholarships, see the “Student Development Services” section of this catalog under the Financial Aid heading.

More information about the College Foundation may be found on the College Web site at www.johnstoncc.edu/foundation.
GENERAL ADMISSION POLICY

Johnston Community College operates under the open-door admission policy. Any high school graduate or non-graduate who is 18 years of age or older and can benefit by pursuing further education may be admitted to the College, provided the person makes application and completes the admission process.

It is the policy of Johnston Community College to encourage young people to complete their high school education before seeking admission to the College. Counseling and guidance are provided as a part of the admission process to help the applicant establish educational goals and select a program of study appropriate to the applicant’s interests, aptitudes, and career objectives.

Applicants for admission are accepted (and placed in a program of study) based upon general admission standards. For certain programs of study, applicants are required to also meet specific program admission standards, as described in this section under the “Admission Standards” heading.

Under certain circumstances, an applicant who is a minor between the ages of 16 and 18 years of age may be admitted to an appropriate program of study in accordance with regulations prescribed in the North Carolina Administrative Code, Title 23, Section 2C.0305, Education Services for Minors as outlined below.

A minor, 16 years old or older may be considered a student with special needs and may be admitted to an appropriate program of study in accordance with regulations prescribed in the North Carolina Administrative Code, Title 23, Section 2C.0305, Education Services for Minors as follows:

1. Upon recommendation of the chief administrative school officer and the approval of the president of the College;
2. Upon approval of the student’s program by the principal of the school and the president of the College; and
3. Upon certification by the principal that the student is taking at least three high school courses and is making appropriate progress toward graduation.

4. Enrollment of high school students shall not displace adults but may be admitted any term on a space available basis; and
5. Students must meet the same prerequisite and course admission requirements as adult college students.

Admission policies and standards are established upon recommendation of the respective admissions committees and administration and approval of the Board of Trustees. The vice president of student services is responsible for admission of curriculum students and administration of admission policies.

The College is a Service-members Opportunity College serving the voluntary higher education needs of military students.

Students with a felony conviction may have limited certification and employment opportunities.

ADMISSION STANDARDS

General Admission Standards

General admission standards for curriculum programs of study are as follows:

- **Age.** Applicants for all general, technical, and vocational education programs, adult high school education, adult basic education, and continuing education courses must be at least 18 years of age or be a high school graduate. However, an applicant who is a minor between the ages of 16 and 18 years of age may be considered a student with special needs and may be admitted to an appropriate program of study in accordance with policy established by the State Board of Education. Specific requirements applicable to minors are defined in this section under the “General Admission Policy” heading.

- **Education.** An applicant’s general level of education should be sufficient to make possible reasonable progress in the program of study. Applicants for associate degree programs must be high school graduates or equivalent, as recognized by the state. The College will only recognize high school diplomas from regionally accredited schools or home schools registered with the state. Students not completing such a program must complete the GED or attain an Adult High School diploma through an accredited institution. However, consideration is given to others who demonstrate sufficient general education, motivation, and potential for making reasonable progress in a vocational education program through scores on an independently administered standardized achievement test.
Specific Program Admission Standards

Admission standards for specific curriculum programs of study are as follows:

1. Applicants for admission to the following programs are required to meet the above general admission standards in terms of age and education: Accounting; Advertising and Graphic Design; Air Conditioning, Heating, and Refrigeration Technology; Associate in Arts; Associate in Arts – Pre-Business Administration; Associate in Fine Arts – Art and Music; Associate in Science; Associate in Science – Biology and Biology Education; Associate in Science - Pre – Engineering; Bioprocess Technology; Building Construction Technology, Business Administration; Business Administration - International Business; Community Spanish Interpreter; Computer Programming; Heavy Equipment and Transport Technology; Landscape Gardening; Machining Technology; Medical Office Administration; Networking Technology; Office Systems Technology; Paralegal Technology; and Welding Technology. Specific program admission requirements are not applicable to the above programs of study.

2. Health Programs. Students admitted to health programs (Associate Degree Nursing, Cardiac and Vascular Sonography,Computed Tomography and Magnetic Resonance Imaging, Interventional Cardiac and Vascular Technology, Medical Assisting, Medical Sonography, Nuclear Medicine Technology, Pharmacy Technology, Radiography, and Therapeutic Massage) will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.

3. Specific program admission requirements in addition to age and education are applicable to the following programs of study:

a. Associate Degree Nursing
   - Have attained a minimum grade of “C” on two science courses (biology and advanced biology, chemistry, or the equivalent). BIO 110, BIO 111 or BIO 112, or CHM 131 may be used to satisfy these requirements.
   - Have attained a minimum grade of “C” on one course in algebra.
   - Must have met the Johnston Community College minimum requirements for ENG 111 and MAT 080.
   - Attend mandatory information session on-line or on-campus.
   - Due to increasing use of information technology in health care, applicants are strongly encouraged to develop proficiency in keyboarding skills and use of the computer.
   - Be interviewed by an admissions counselor by February 15.
   - Complete a health occupations test for Nursing. Applicants may take the health occupations test once per academic year. The health occupations test must be taken at Johnston Community College. Study guides are available in the College bookstore. Visit our website at www.johnstoncc.edu or www.atitesting.com for additional information. The Academic Skills Center offers a Prep Program for the health occupations test. The health occupations test scores are valid for two-years.
   - Submit evidence of satisfactory physical and emotional health required for participation in the program prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
   - If accepted, the student must attend a mandatory two-part orientation session.
   - Students with a felony conviction may have limited licensure and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.
   - Applications must be received in the Student Services Office by February 15th of each year. A separate application is required to apply to the Associate Nursing program. The College reserves the right to extend the application period when warranted.
   - The student must possess current CPR Healthcare Provider certification while enrolled in the program.
   - If accepted, nursing applicants must be Nurse Aide I certified by February 15 for Fall Admission. Applicants must have successfully completed a North Carolina approved Certified Nurse Aide I Program and be currently listed on the Nurse Aide I Registry with no substantiated finding of resident abuse, resident neglect or misappropriation of resident property in a Nursing Facility. The Certified Nurse Aide I Training program must include theory, lab, and clinical components. The applicant must provide a copy of certificate of completion from an approved program. Challenging the Nurse Aide I examination will not meet this requirement.
   - The deadline for Advanced Placement is August 15 of each year. The deadline for LPN to Associate Degree is February 1 of each year.

b. Basic Law Enforcement Training
   - Complete the personal history questionnaire.
c. Cardiac and Vascular Sonography

- An applicant must submit a Johnston Community College application and a program specific application. Applications must be received in the Student Services Office by March 1 of each year. The College reserves the right to extend the application period when warranted. The sonography program begins in the fall semester of each year.
- Official transcripts from high school and all colleges attended must be on file by March 1 to process the application. The applicant must have a high school diploma or equivalency and meet the minimum requirements for ENG 111 and MAT 080.
- The applicant must have attained a minimum grade of “C” on two science courses with labs. One science course with lab must be a physics course. The other science course must be biology, advanced biology or chemistry or equivalent. PHY 110 & PHY 110A may be taken to satisfy the physics requirement.
- The applicant must have attained a minimum grade of “C” on one algebra course (high school or college level) regardless of math placement scores.
- The applicant must be interviewed on campus by an admissions counselor and attend a mandatory sonography information session on-line or on-campus.
- The applicant must complete a health occupations test by March 1. Applicants may take the health occupations test once per academic year. The health occupations test must be taken at Johnston Community College. Study guides are available in the College bookstore. Visit our website at www.johnstoncc.edu or www.ateesting.com for additional information. The Academic Skills Center offers a Prep Program for the health occupations test. The health occupations test scores are valid for two-years.
- The student must possess a current CPR Healthcare Provider certification while enrolled in the program.
- If accepted, the student must attend a mandatory orientation by the program director or designee prior to program registration. Students will receive a letter from the sonography program director indicating the date of the orientation session.
- Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screenings as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program. Certifying agencies may deny certification eligibility due to a criminal background.
- Submission of evidence of satisfactory physical and emotional health is required for participation in the program prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
- Additional points will be given on the point ranking sheet for applicants who have completed a medical terminology curriculum course or a high school health occupations course with a “C” or better.
- Applicants who do not hold an associate’s or bacheloer’s degree in an allied health profession* will be required to hold a current and unrestricted verification on the NC Nursing Assistant Registry (CNA) by June 15 of the acceptance year.
- Additional points will be given on the point ranking sheet for applicants who have completed a medical terminology curriculum course or a high school health occupations course with a “C” or better.
- Applicants who do not hold an associate’s or bachelor’s degree in an allied health profession* will be required to hold a current and unrestricted verification on the NC Nursing Assistant Registry (CNA) by June 15 of the acceptance year.

* Associate or bachelor degree patient care-related allied health professions accepted include: nursing, radiography, respiratory therapy, physical therapy, sonography, and emergency medicine (paramedic)

d. Computed Tomography and Magnetic Resonance Imaging Technology

- Must be a graduate from an accredited (AMA approved) associate or bachelor’s degree radiography program and must have achieved a 2.5 GPA or higher at the time of application.
- Must be certified by the American Registry of Radiologic Technologists (ARRT) or be ARRT eligible. Certification eligible students accepted into the program must show evidence of ARRT certification to receive their certificate and/or diploma.
- Attend a Computed Tomography and Magnetic Resonance Imaging Technology (CT/MRI) information session.
- Spring admission applications for CT certificates are accepted through November 1 of each year. Applications for the CT/MRI diploma program and fall CT certificate program will be accepted through March 1 of each year.
• Submit a completed student medical form. The medical form must be completed by qualified medical personnel and submitted within 60 days prior to the start of clinical education.

• Submit a metallic hazard checklist and completed CT/MRI applicant points form. These documents will be provided at the CT/MRI information session or mailed per request.

• If accepted, must submit verification of CPR certification.

• Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.

h. Interventional Cardiac and Vascular Technology
• Must submit completed application and all official transcripts.

• Must currently be enrolled as a second level radiography student or have graduated from an accredited radiography program and be currently certified by the American Registry of Radiologic Technologists (ARRT) or be ARRT certified before the first day of class.

• Applicants will be admitted on a first come, first served basis.

• The program will begin in August of each year and will not follow the regular College calendar. A semester will be 18 weeks in length.

• The student must be interviewed by an admissions counselor.

• The student must possess current CPR Healthcare Provider certification while enrolled in the program.

• If accepted, students must become ACLS certified prior to entering the second (2nd) semester.

• Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.

• Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.

i. Medical Assisting
• Application deadline is May 1 of each year. The College reserves the right to extend the application
period when warranted.
• Students will be admitted on a first come, first served basis.
• Have graduated or will graduate from high school or equivalent before entering the program.
• Must have met the Johnston Community College requirements for ENG 111 and MAT 070 and a current 2.0 GPA on high school or college coursework.
• Be interviewed by an admissions counselor.
• Attend a mandatory information session on-line or on-campus.
• Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
• The applicant must have attained a minimum grade of “C” on two science courses with labs. The other science course must be biology, advanced biology or chemistry or equivalent. PHY 110 & PHY 110A may be taken to satisfy the physics requirement.
• The applicant must have attained a minimum grade of “C” on one algebra course (high school or college level) regardless of math placement scores.
• Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
• The applicant must possess current CPR Healthcare Provider certification while enrolled in the program.
• The applicant must be interviewed on campus by an admissions counselor and attend a mandatory information session on-line or on-campus.
• The applicant must complete the health occupations test by March 1. Applicants may take the health occupations test once per academic year. The health occupations test must be taken at Johnston Community College. Study guides are available in the College bookstore. Visit our website at www.johnstoncc.edu or www.atitesting.com for additional information. The Academic Skills Center offers a Prep Program for the health occupations test.
• If accepted, the student must attend a mandatory orientation by the program director or designee prior to program registration. Students will receive a letter from the sonography program director indicating the date of the orientation session.
• Additional points will be given on the point ranking sheet for applicants who have completed a medical terminology curriculum course or a high school health occupations course with a “C” or better.
• Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.
• The national exam for medical assisting contains questions as to whether or not the applicant has ever been convicted of a misdemeanor/felony excluding minor traffic violations. If the answer is “Yes,” the applicant is asked to provide an explanation. This question is asked because of legal requirements for becoming certified as a medical assistant.

j. Medical Sonography
• An applicant must submit a JCC application and a program specific application. Applications must be received in the Student Services Office by March 1 of each year. The College reserves the right to extend the application period when warranted. The sonography program begins in the fall semester of each year.
• Official transcripts from high school and all colleges attended must be on file by March 1 to process the application. The applicant must have a high school diploma or equivalency and meet the minimum requirements for ENG 111 and MAT 080.
• The applicant must have attained a minimum grade of “C” on two science courses with labs. One science course with lab must be a physics course. The other science course must be biology, advanced biology or chemistry or equivalent. PHY 110 & PHY 110A may be taken to satisfy the physics requirement.
• The applicant must have attained a minimum grade of “C” on one algebra course (high school or college level) regardless of math placement scores.
• Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
• The student must possess current CPR Healthcare Provider certification while enrolled in the program.
• The applicant must be interviewed on campus by an admissions counselor and attend a mandatory information session on-line or on-campus.
• The applicant must complete the health occupations test by March 1. Applicants may take the health occupations test once per academic year. The health occupations test must be taken at Johnston Community College. Study guides are available in the College bookstore. Visit our website at www.johnstoncc.edu or www.atitesting.com for additional information. The Academic Skills Center offers a Prep Program for the health occupations test.
• If accepted, the student must attend a mandatory orientation by the program director or designee prior to program registration. Students will receive a letter from the sonography program director indicating the date of the orientation session.
• Additional points will be given on the point ranking sheet for applicants who have completed a medical terminology curriculum course or a high school health occupations course with a “C” or better.
• Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.
• Applicants who do not hold an associate’s or bachelor’s degree in an allied health profession* will be required to hold a current and unrestricted verification on the NC Nursing Assistant Registry (CNA) by June 15 of the acceptance year.

* Associate or bachelor degree patient care-related allied health professions accepted include: nursing, radiography, respiratory therapy, physical therapy, sonography, and emergency medicine (paramedic).

k. North Carolina Truck Driver Training School
• Have a completed DOT physical examination form and Commercial Driver’s License permit.
• Have the state department of motor vehicles forward a copy of the applicant’s seven-year motor vehicle record.
• Must be a U.S. citizen or permanent resident alien.

I. Nuclear Medicine Technology
• An applicant must submit a Johnston Community College application and a program specific application. The College reserves the right to extend the application period when warranted.
• Official transcripts from high school and all colleges attended must be on file by March 1 of each year. A separate application is required to apply to the Nuclear Medicine Technology program. The College reserves the right to extend the application period when warranted. The Nuclear Medicine Technology program begins in the fall semester of each year.

• Official transcripts from high school and all colleges attended must be on file by March 1 to process the application.
• Applicants must have attained a minimum grade of “C” on two science courses with labs (high school or college level biology, chemistry or physics).
• Applicants must have attained a minimum grade of “C” on one algebra course (high school or college level) regardless of math placement scores.
• Applicants must have met the Johnston Community College minimum requirements for ENG 111 and MAT 080.
• Attend a mandatory Nuclear Medicine Technology program information session on-line or on-campus.
• Be interviewed by an admissions counselor.
• Complete a health occupations test by March 1.
• If accepted, must attend a mandatory nuclear medicine orientation. Students will receive a letter from the program director indicating the date of the orientation session.
• Submission of evidence of satisfactory physical and emotional health is required for participation in the program prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.
• The student must possess current CPR Healthcare Provider certification while enrolled in the program.
• Students with a felony conviction may have limited licensure and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.
• Diploma Applicants: Currently certified allied health professionals with an associate's or bachelor's degree in a patient care-related field are not required to complete an associate's degree in nuclear medicine. These students may exit the nuclear medicine program at the diploma level. Allied health professionals must be currently certified by their certifying agency prior to registration in the nuclear medicine program.

m. Pharmacy Technology
• An applicant must submit a completed Johnston Community College application. The Pharmacy Technology Program begins in the fall semester of each year.
• Official transcripts from high school and all colleges attended must be on file to process the application.
• The applicant must have a high school diploma or equivalent as recognized by the State of North Carolina.
• The applicant must have attained a minimum grade of “C” on one unit of biology or chemistry (high school or college level) and one unit of algebra (high school or college level).
• The applicant must have met the Johnston Community College minimum requirements for ENG 111 and MAT 070.
• The applicant must be interviewed by an admissions counselor.
• Fourteen applicants are admitted for fall semester on a first come, first served basis.
• If admitted, students must attend a mandatory orientation by the program director or designee prior to program registration. Students will receive a letter from the program director indicating the date of the orientation session.
- Students must submit evidence of satisfactory physical and emotional health prior to spring semester. Student must acknowledge physical as well as mental competence to be able to function in a busy health care environment.

- Students with a felony conviction may have limited certification and employment opportunities. If admitted, students must submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the Program.

- Students must possess current CPR Healthcare Provider certification while enrolled in the Program.

n. Radiography
- Have attained a minimum grade of "C" on two science courses (biology and advanced biology or physics or chemistry or the equivalent, BIO 110, BIO 111 or BIO 112 or CHM 131 or PHY 110 & PHY 110A may be taken to satisfy these requirements).
- Must have met the JCC minimum requirements for ENG 111 and MAT 140.
- Complete a health occupations test by February 15. Applicants may take the health occupations test once per academic year. The health occupations test must be taken at Johnston Community College. Study guides are available in the College bookstore. Visit our website at www.johnstoncc.edu or www.atitesting.com for additional information. The Academic Skills Center offers a Prep Program for the health occupations test. The health occupations test scores are valid for two years.
- Attend a mandatory Radiography program information session on-line or on-campus.
- Be interviewed by an admissions counselor.
- Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.

- Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.

- The student must possess current CPR Healthcare Provider certification while enrolled in the program.

- Application must be received in the Student Services Office by February 15 of each year. A separate application is required to apply to the Radiography program. The College reserves the right to extend the application period when warranted.

- Due to the increasing use of information technology in healthcare, applicants are strongly encouraged to develop proficiency in keyboarding skills and use of the computer.

o. Therapeutic Massage
- Submit an application to the Therapeutic Massage program by May 1 of each year. The College reserves the right to extend the application period when warranted.
- Applicants are accepted on a first come, first served basis.
- Must be a high school graduate or equivalent and 18 years of age.
- Applicants seeking a degree or diploma must meet the Johnston Community College requirements for ENG 111.
- Attend a mandatory Therapeutic Massage program information session on-line or on-campus.
- Be interviewed by an admissions counselor.
- Submit three professional references for academic and/or work performance.
- Submit verification of three (3) professional massage sessions received from a NC licensed therapist to demonstrate knowledge of the field of study.
- Students with a felony conviction may have limited certification and employment opportunities. If admitted, will submit to criminal background checks and initial and random drug screening as directed by affiliating clinical agencies. Clinical agencies reserve the right to deny students access based on criminal background. This denial will result in the inability of the student to successfully complete the program.

- The student must possess current CPR Healthcare Provider certification while enrolled in the program.

- Submission of evidence of satisfactory physical and emotional health is required prior to registration. Students must acknowledge physical as well as mental competence to be able to function in a busy health care environment.

- Students must supply their own books, linens, and accessories for hands-on massage therapy practice. Massage tables/chairs must be purchased by the end of the first month of classes. Cost of supplies and tables is approximately $400-$800 the first month.
Special Program Admissions

Applied Industrial Technology certificate programs are conducted at units of the North Carolina Department of Correction. Regular admission procedures and requirements are not applicable. Inmate students are assigned training programs at various times throughout the year. Assignments are made through Department of Correction personnel. Programs offered include Air Conditioning, Heating, and Refrigeration Technology; Cosmetology; Electrical/Electronic Technology; Electronic Engineering Technology; Food Service Technology; Horticulture Technology; Manicuring Technology; Office Systems Technology; Masonry; and Plumbing.

A special certificate program, Greenhouse and Grounds Maintenance, is offered in conjunction with the Johnston County Mental Health Department. This program is designed to provide therapeutic training for students with emotional/mental handicaps. Students are referred to the program through the Johnston County Mental Health Department.

ADMISSION PROCEDURES

Application forms may be requested in person, or may be requested by telephone, fax, online, or in writing to:

Student Services
Johnston Community College
P.O. Box 2350
Smithfield, North Carolina 27577
Telephone: (919) 209-2128
Fax: (919) 989-7862
Web site: http://www.johnstoncc.edu

The application for admission and all transcripts of the applicant’s high school and previous post-secondary educational record should be submitted as soon as possible within one year prior to admission.

Applicants should complete the following steps:

1. Submit a complete application.
2. Have all transcripts (in a sealed envelope) of high school or GED/Adult High School Diploma and post-secondary educational records mailed to the Admissions Office. All transcripts must be received before the application for admission can be processed.
3. Report as scheduled to the Admissions Office for placement testing (if needed) and the admission interview.
   Applicants are notified when to report

Accurate and complete information on the application form and supporting information is required. Applicants are notified when they have been accepted for admission and when to report for registration. Falsification, misrepresentation, or omission of information on the application may result in revocation of admission.

A student who desires to enter a particular program of study, but is not accepted to pursue that program, may be accepted for admission to an alternate program. This may involve admission to (1) another program of study, (2) developmental courses, (3) individualized programmed instruction, or (4) a combination of these approaches designed to help the student overcome academic limitations.

In certain instances when it is in the best interest of the student and is deemed educationally feasible, an applicant may be granted tentative acceptance for admission and be permitted to register without immediately meeting full admission requirements. Tentative acceptance for admission is valid for only one semester. During this semester, all pertinent admissions documents must be received and the student must complete all steps for full acceptance in order to register for the second semester.

Following receipt of the application for admission and all transcripts, the applicant is invited for placement testing (if needed) and an admission interview with a counselor and/or program director. The applicant and the counselor review the application, discuss the applicant’s career plans, and review program requirements.

The purpose of the admission interview is to provide information, clarify the applicant’s goals, and confirm educational career plans. The applicant is encouraged to consider the full range of educational programs and services available and to evaluate probability for success in relation to the individual’s educational preparation, interests, aptitudes, and career objectives. Placement tests are used to assess educational preparation in the areas of reading, grammar, composition, and mathematics. The tests are given for guidance in the admission and placement of students in programs.

TESTING SERVICES

Accuplacer

Johnston Community College uses an online computerized placement test (CPT) called ACCUPLACER, which is produced by CollegeBoard. On rare occasions, applicants who are not yet comfortable using a computer may be administered a paper-and-pencil placement test called COMPASSION. These students should notify the Admissions Office prior to being scheduled for testing. Students with other special needs must make testing arrangements with Admissions and Counseling staff. The College accepts COMPASS and ASSET placement scores earned at another institution only when accompanied by actual course placement.

A score of 450 on the verbal section of the SAT exempts an applicant from the reading and writing components of the placement test. A score of 450 on the mathematics section of the SAT exempts an applicant from the mathematics component of the placement test.

Placement testing is not required for certificate program applicants, excluding Cosmetology, Phlebotomy, and Early Childhood Education.
Accuplacer Retest Policy

Retesting is permitted only with the approval of a counselor or development course instructor. During the admissions interview, a counselor may grant approval after reviewing information such as the student’s academic record, performance in high school coursework, and previous test performance. Upon approval, a retest authorization form will be issued and the student will be given a new date for testing. Developmental course instructors may approve retesting if the student shows exceptional performance in the course. In this case, students are responsible for obtaining a signed retest authorization form from their instructor and submitting it to Student Services. Students will be contacted with a date for testing. Other extenuating circumstances regarding retesting must be approved by the Testing Coordinator.

TEAS

TEAS (Test of Essential Academic Skills) is an assessment used as part of the admissions process for Nursing, Radiography, Medical Sonography, Cardiovascular Sonography, and Nuclear Medicine. The computerized assessment contains four parts: reading, math, science, and English. There is a fee to take this assessment. Students are scheduled after a program-specific application is submitted and the student has met all program admission requirements.

CLEP

CLEP (College Level Examination Program) offers testing for course credit through an online computerized assessment. Johnston Community College is a national test center for the program. The exam allows a student to receive credit and exemption for a course if a minimum score is obtained.

DSST

DSST (Dantes Subject Standardized Test) is a paper/pencil exam that can be used to receive course credit and exemptions. Students who wish to obtain credit for a course not offered through CLEP and DSST testing should refer to the Credit by Examination or Credit by Experience policies.

READMISSION

Applications for readmission of former students are received and processed by the Admissions Office. Students applying for readmission to a curriculum program who have not attended for two or more consecutive semesters must enroll under the current College catalog.

Prior disciplinary records may be considered when students seek admission or readmission to the College. The College reserves the right to refuse admission to any student whose enrollment or continued presence is considered a risk for campus safety or a disruption of the educational process.

Decisions on applications for readmission may be appealed by the applicant to the Enrollment Management Committee or may be referred by the vice president of student services to the Enrollment Management Committee.

ADMISSION APPEALS

Admission/readmission policies and standards are administered by the vice president of student services. Appeals of application or admission decisions are heard by the Enrollment Management Committee. Appeals must be submitted to the chair or secretary of the Enrollment Management Committee in writing within 10 days following the date of the initial decision.

ADMISSION TO CONTINUING EDUCATION COURSES

Information regarding admission to Continuing Education courses may be found in the “Continuing Education” section of this catalog.

PERSISTENCE AND GRADUATION RATES

Information concerning persistence and graduation rates is available upon request from the Student Services Office, on the College’s Web site, and in other publications.

STUDENTS TRANSFERRING TO JCC

Applicants for admission as transfer students may be admitted and granted advanced standing based on acceptance of course work completed at other accredited colleges, universities, or post-secondary institutions. All courses for which transfer credit is possible are evaluated in terms of the curriculum to be pursued at the College. The application for admission and all transcripts must be received before an application can be processed. Johnston Community College transfer students are in good standing following evaluation of courses completed with a grade of “C” or better. Therefore, no transfer student is admitted either provisionally or on probation.

Course credits earned at other institutions will be accepted for transfer subject to the following conditions:

1. The course work must be applicable to the program of study the student desires to pursue.
2. A minimum grade of “C” or the equivalent must have been earned for a course to be considered for transfer.

SPECIAL STUDENTS

Persons who wish to take selected general education, technical, or applied technology curriculum courses to meet special educational needs may be admitted as special students. Special students are required to submit an application for admission as a special student, but are not required to meet regular admissions requirements. A special student may apply for full admission to a program of study effective the following semester.
**DEVELOPMENTAL COURSES**

Students who demonstrate academic deficiencies in English, reading, and math are placed in appropriate developmental courses. Students may also be placed in transitional academic programs such as the Successful Transition and Academic Readiness Program (STAR). These courses are designed to increase students’ aptitude in the subject and strengthen their preparation to pursue further education.

Initial student placement in developmental courses and/or the STAR Program is based primarily on college placement scores; however, course enrollment may also be voluntary or recommended by the student's faculty advisor. Students may take a combination of developmental and curriculum courses.

A student taking required developmental courses must earn a grade of “C” or better in order to progress to the curriculum program or to the next pre-curriculum course level. Grades earned in developmental courses are not included in the grade point average and credit hours earned do not count toward graduation. The majority of developmental courses are offered in every term, both day and evening.

**DISTANCE EDUCATION**

In order to obtain a certificate, diploma, or degree at Johnston Community College, a student will need to follow the general admissions process. If they are offered, distance education courses may be taken instead of on-campus courses. Once admitted to the College, students will be assigned an advisor who will assist in the selection of courses and in the progression of their chosen curriculum.

**INTERNATIONAL STUDENT ADMISSION**

Johnston Community College has approval by the U.S. Department of Homeland Security and U.S. Immigration and Customs Enforcement for attendance by international students. Application for admission should be made at least six months prior to the semester in which the applicant plans to enroll. International students are treated as nonresidents of the State of North Carolina with respect to tuition and fees. The College is unable to provide financial aid to international students; therefore, international students must have sufficient funds to cover all living expenses, tuition, and fees while attending the College. Student housing is not provided by the College. International students are expected to make their own arrangements for housing.

The following items are required for admission:

1. **Application for Admission and Residence Status Application.** These forms are provided by the College and should be completed and returned at least six months prior to the date of proposed admission to initiate the admission process.
2. **Academic Records.** A certified copy of the original educational records, to include all previous academic experiences, is required. If the original copy of this record is written in a foreign language, a certified English translation is required.

3. **The Test of English as a Foreign Language (TOEFL).** TOEFL scores are required of all applicants, except those from countries where English is the only official language, as evidence of adequate proficiency in English. The minimum acceptable TOEFL score is 550.

4. **Placement and Testing Interview.** Applicants must complete placement testing and personal interviews before they can be accepted for admission.

5. **Financial Statement.** A signed financial resource statement is required of all applicants. This should be a detailed statement of the applicant's financial situation, including the amount of money available per year, source of income, and any other pertinent information. The availability of funds sufficient to meet expenses for the first academic year must be certified. The inclusion of any false information constitutes grounds for dismissal from the College.

6. **Student medical form.** A student medical form, completed and signed by a physician, must be submitted on the form provided by the College. The student must have completed the hepatitis B series.

7. **Responsibility Statement.** Each applicant must furnish a certified statement from a United States citizen stating that the citizen agrees to accept responsibility for sponsoring and assisting the applicant as may become necessary for the applicant to pursue his or her educational objective.

Upon receipt of all above items, the applicant’s file will be presented to the Enrollment Management Committee for the admissions decision. The applicant will be informed by mail of the committee’s decision. Form I-20 A-B, Certificate of Eligibility, will be prepared on request from applicants who have been formally accepted for admission to the College.

**HEALTH STANDARDS**

Curriculum students are required to complete an individual student health questionnaire. For certain programs, students are required to secure a physical examination prior to initial registration.

Students should be in a sufficient state of health to successfully pursue the program of study chosen. Communicable disease or severe mental illness may prohibit approval to register for classes when health records indicate that attendance would be detrimental to the health and/or safety of the student or others with whom the student may come in contact while pursuing a program of study.

For certain specialized programs of study such as Associate Degree Nursing, Basic Law Enforcement Training, Cardiac and Vascular Sonography, Computed Tomography and Magnetic Resonance Imaging Technology, Cosmetology, Early Childhood Education, School Age Education,
Interventional Cardiac and Vascular Technology, Medical Assisting, Medical Sonography, Nuclear Medicine Technology, Pharmacy Technology, Radiography, and Therapeutic Massage, a student medical form and titers and immunizations (physical examination by a primary care provider) is required. The North Carolina Truck Driver Training School requires a DOT physical examination form. For these programs, students are required to meet health standards specific to the occupation for which they are preparing. These are generally accepted standards of physical ability to perform the requirements of the program and to engage in educational and clinical experiences in such a way as not to endanger the student, other students, or members of the public including patients, patrons, customers, minors, or other persons with whom the student will come in contact as a part of the educational program.

REPORTABLE COMMUNICABLE DISEASE

Students and employees of the College who may be infected with a reportable communicable disease, as defined by the North Carolina Division of Health Services, will not be excluded from enrollment or employment, or restricted in their access to college services or facilities unless medically-based judgments in individual cases establish that exclusion or restriction is necessary to the welfare of the individual, other members of the college community, or others associated with the instruction through clinical, intern, laboratory, or other such experiences, involving the general public. Persons who know or have reasonable basis for believing that they are infected are expected to seek expert advice about their health circumstances and are obligated, ethically and legally, to conduct themselves responsibly in accordance with such knowledge for the protection of others.

Persons who know that they are infected are urged to share that information with the department chair or faculty advisor and the vice president of student services so that the College can assist in the appropriate response to their health and educational needs. Such information will be disclosed only to responsible officials of the College on a strictly limited, need-to-know basis, unless the individual consents in writing to release of the information to others.
Johnston Community College, a member of the North Carolina Community College System, offers educational opportunities at low cost to the student. Tuition and fees are payable at the beginning of each semester. Tuition rates are established by the General Assembly of North Carolina. The activity and technology fees are set by the Board of Trustees in accordance with policy established by the State Board of Community Colleges. **Tuition and fees are subject to change without notice.** The cost of textbooks and supplies is an additional expense and varies with the program of study.

Students who have incurred indebtedness to the College will not be allowed to register until cleared by the appropriate official of the College.

### Tuition for Residents

Tuition and fees (activity and technology) payable by curriculum students who qualify as residents of the State of North Carolina for tuition purposes, are as follows (subject to change):

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Tuition</th>
<th>Activity Fee</th>
<th>Technology Fee</th>
<th>Total</th>
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<td>$848.50</td>
</tr>
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</table>

For purposes of financial aid, a full-time student is defined as one who is registered for 12 or more semester hours of course work. A part-time student is one who is registered for less than 12 semester hours of course work.

A student is considered to be officially registered only after all tuition, fees, and other charges have been paid in full or acceptable arrangements for third party billing have been approved by the Business Office.

The rate of tuition charged for auditing a course is the same as the rate charged for taking the course for academic credit. Fees and regulations for courses taken through Continuing Education are listed in the “Continuing Education” section of this catalog.

### Tuition and Fee Exemption

Senior citizens who are North Carolina residents and are 65 years of age or older are exempt from the payment of tuition, activity, and technology fees up to 6 hours of credit instruction or 96 contact hours of non-credit instruction per academic semester. Information concerning waiver of the registration fee applicable to certain continuing education courses is found in the “Continuing Education” section of this catalog.

### Tuition for Non-Residents

Any student whose legal residence is outside of the State of North Carolina, or, in the case of students who are boarding or living with relatives in the community and whose parents or guardians live outside the state, and who do not otherwise qualify as residents for tuition purposes under General Statute 116-143.1, shall pay tuition and activity fee as follows (subject to change):

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Tuition</th>
<th>Activity Fee</th>
<th>Technology Fee</th>
<th>Total</th>
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</tr>
</tbody>
</table>

For purposes of financial aid, a full-time student is defined as one who is registered for 12 or more semester hours of course work. A part-time student is one who is registered for less than 12 semester hours of course work.

A student is considered to be officially registered only after all tuition, fees, and other charges have been paid in full or acceptable arrangements for third party billing have been approved by the Business Office.
RESIDENCE STATUS FOR TUITION PURPOSES

The tuition charge for students who qualify as residents of the State of North Carolina is less than the charge for non-resident students. To qualify for in-state tuition, as specified in General Statute 116-143.1, a legal resident must have maintained his or her domicile in North Carolina for at least the 12 months prior to his or her classification as a resident for tuition purposes. In order to be eligible for such classification, the individual must establish that his or her presence in the state during such 12-month period was for purposes of maintaining a bona fide domicile, rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education. Further, (1) if the parents (or court-appointed legal guardian) of the individual seeking resident classification are bona fide domiciliaries of this state, this fact shall be prima facie evidence of domiciliary status of the individual applicant, and (2) if such parents or guardian are not bona fide domiciliaries of this state, this fact shall be prima facie evidence of non-domiciliary status of the individual.

The residency classification of a student, for purposes of applicable tuition rates, is required to be changed if, since original establishment of the student’s current classification, his or her state of legal residence has changed.

If a student claims eligibility, as a member of the armed forces or a dependant relative of such a member, to be charged the in-state tuition rate under G.S. 116-143.3, the student must submit the appropriate application prior to initial enrollment or reenrollment for which the student claims the tuition benefit. The student must also submit the application prior to each successive academic year of enrollment.

Regulations concerning the classification of students by residence for purposes of applicable tuition differentials are set forth in detail in A Manual To Assist The Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. Copies of the manual are available and can be seen upon request in the College’s Library.

STUDENT ACTIVITY FEE

The student activity fee provides financial support for the student activities programming, including student government, intercollegiate athletics, intramural recreation, student publications, social activities, student clubs and related activities, student insurance, student identification cards, parking permits, and other projects of benefit to students. The activity fee is non-refundable after classes begin.

TECHNOLOGY FEE

The technology fee supports the procurement, operation, and repair of computer and other instructional technology, including the supplies and materials that support the technology. This permits the College to purchase computers and other technology, hire support positions to operate and maintain this technology, and buy the necessary supplies and materials for operations.

The technology fee is $1 per credit hour and is non-refundable after classes begin.

CURRICULUM REFUND

Refunds shall be in accordance with the North Carolina Administrative Code and will be made only under the following circumstances:

1. A 100-percent tuition refund shall be made if the student officially withdraws prior to the first day of the academic semester as noted in the academic calendar. Also, a student is eligible for a 100-percent refund if the class in which the student is officially registered fails to “make” due to insufficient enrollment.

2. A 75-percent tuition refund shall be made if the student officially withdraws from the class prior to or on the official 10-percent point of the semester.

3. For classes beginning at times other than the first week (seven calendar days) of the semester, a 100-percent tuition refund shall be made if the student officially withdraws from the class prior to the first class meeting. A 75-percent tuition refund shall be made if the student officially withdraws from the class prior to or on the official 10 percent point of the semester.

4. Technology, activity, and curriculum fees are non-refundable after classes begin.

5. Where a student, having paid the required tuition for a semester, dies during the semester (prior to or on the last day of examinations of the College the student was attending), all tuition and fees for that semester may be refunded to the estate of the deceased.

To comply with applicable federal regulations regarding refunds, federal regulations shall supersede the state refund regulation stated in this rule.

TEXTBOOK AND OTHER EXPENSES

Textbook and other items are an additional expense for which the student should plan. The cost of textbooks varies with program of study, but the average cost is usually between $500 and $600 per semester for full time students.

BOOKSTORE REFUNDS

1. All returns should be made by the date posted in the bookstore each semester.

2. For a full refund you must have the sales receipt; the book must be in the condition in which it was purchased free of writing, highlighting, creases, scratches, stains or other
damage and software and access code packaging must be unopened.

3. No refunds or exchanges will be given without a sales receipt.

4. Books which were purchased new but have been written in, highlighted, or damaged in any way will be refunded/exchanged at 90% of the new price.

5. Books labeled “No return if opened” are not returnable if shrink wrap is broken

6. Nursing testing materials are not returnable for any reason.

7. Supplies or optional books may be exchanged within 10 days of purchase when accompanied by the receipt.

8. Purchases made via cash or check will be refunded in the form of a check issued by the business office.

9. All refunds will be applied to any outstanding balances on the students account prior to refund being issued.

10. No refund will be given on supplies.

OTHER FEES AND COSTS

It should be clearly understood by the student that in certain courses the student must also provide at his or her own expense certain items needed to perform practice work required in that course. Examples of such items are notebooks, uniforms, tools, cosmetology kits, and art supplies.

Students in health programs are required to purchase uniforms and miscellaneous items that may cost approximately $200 depending on the program.

Students in the Advertising and Graphic Design program are required to purchase certain art supplies and materials constituting an additional expense to the student.

Students in the Cosmetology program are required to purchase supply kits and uniforms constituting an additional expense to the student.

Distance education classes may require the purchase of lab kits, software, and additional technology/equipment.

Students in the Associate in Fine Arts - Music program are expected to purchase music for private applied classes and required outfits for the performance electives and supply their own instruments. Applied classes also have an additional $240 curriculum fee.

Students in the Therapeutic Massage program must supply books, linens, and accessories for hands-on massage therapy practice. Approximate cost of supplies, table, and chair is $1,000. The table and chair must be purchased during the first semester.

Books, supplies, and other items may be purchased from the bookstore. Hours of operation are published by the bookstore.

THIRD PARTY SPONSORS

Students must present a letter of authorization from a third-party sponsor detailing all allowed charges prior to registration. Third-party sponsors are defined as any employer, agency, organization, or individual that agrees to pay for a student’s tuition, fees, and/or books. Once the third-party sponsor authorization has been approved by the College, the student’s account will be billed to the sponsor. However, if a sponsor refuses to pay any or all of the student’s account, the student will be responsible for the remaining balance on his or her account. A student will not be allowed to register for future classes until all balances are paid in full.

INSURANCE

Student Accident Insurance

Student accident insurance provides coverage to all registered and enrolled curriculum students for covered injuries sustained while the insured student is:

- participating in activities sponsored or supervised by the school;
- traveling during such activities as a member of a group in transportation furnished or arranged by the school; or
- traveling directly to or from the insured’s home premises and the site of such activities. Johnston Community College is considered the “home premises.”

The cost of coverage for this insurance program is paid by the College using student activity funds.

For further information concerning effective/termination dates, definitions, accidental death and specific loss benefits, accident medical expense benefits, exclusions, and payment of claims, please refer to the North Carolina Community and Technical Colleges Student Accident Insurance brochure. These brochures are available in the Student Services Office.

To file a student accident insurance claim, the student must:

1. Obtain an accident report form and insurance claim form from the Student Services Office within 30 days or as soon as reasonably possible. Employees of the College can access a copy of the accident report form from the College Web site.

2. Complete both forms in their entirety. If possible, have a faculty or staff member sign the accident report form.

3. Return both forms to the administrative assistant to the vice president of student services in the Student Services Office.

4. The student is responsible for submitting the insurance claim form to the college’s insurance carrier. All medical bills and correspondence will be handled between the student and the insurance carrier.
Professional Liability Insurance

Professional liability insurance is required for students in some programs. The cost is approximately $19 per year. Professional liability insurance is required for:

- All students in health programs prior to beginning clinical practice in assigned hospitals and nursing affiliates.
- Certain cooperative work experience sites approved for early childhood students. Students should check with the early childhood director to determine if their cooperative work experience site requires this insurance.
- All cosmetology students.
The objectives of student development are to support the instructional program, respond to student needs, and foster institutional development. In response to the needs of students, student development services assists students in defining their educational and career goals, developing self-direction as independent persons, solving problems that may be encountered, and achieving personal goals within the framework of the educational program of Johnston Community College.

SERVICES TO STUDENTS

Where to Go for What

Absences - Instructor
Academic Advising - Assigned Faculty Advisor or Center for Academic Planning
Academic Probation - Catalog/Counselors
Admissions - Student Services
Address Change - Admissions
Attendance - Instructor
Blackboard - Instructional Technology and Distance Education Center
Books/Supplies - Campus Bookstore
Career Counseling - Counseling
Change Program/Major - Counseling
Clubs and Organizations - Student Activities
Course Selection - Advisor/Counselor
Disability Services - Student Services
Drop a Course - Instructor/Registrar
Emergencies - Information Desk/Student Services
Fees - Business Office
Financial Aid - Financial Aid Office
General Interest Courses - Continuing Education
Grading System - Catalog/Registrar
Insurance - Business Office/Student Services
Job Placement - JobLink Career Center
Lost and Found - Student Services/Information Desk
Parking Permits/Regulations - Information Desk/Business Office
Personal Counseling - Counseling
Registration - Student Services
Scholarship Application - Financial Aid Office
Student ID Card - Library
Placement Testing - Student Services
Transcripts - Registrar
Transfer Counseling - Advisors/Counseling
Veterans - Financial Aid
WebAdvisor - Registrar

CAMPUS VISITS

Johnston Community College encourages prospective students and their parents to visit the campus and tour our facilities. Guided tours are scheduled and published on the prospective students’ page of the JCC website. Individual guided tours may be scheduled Monday through Friday on a case-by-case basis (summer hours will vary) when classes are in session by contacting the coordinator of student recruitment. Information pertaining to academic programs, student services, and the admissions/registration process will be presented during the tour. For detailed information about specific program admission requirements and procedures beyond admission to the general college (i.e. Health Sciences, Basic Law Enforcement Training), please refer to the JCC website or the current JCC Catalog. You may request a disk copy of the current catalog at the time of your visit, or you may access the catalog through the JCC website.

STUDENT PORTAL

WebAdvisor is a Web-based portal that gives students access to class schedules, online registration, financial information, and grades. A link to WebAdvisor is available on the College’s Web site at www.johnstoncc.edu.

COUNSELING SERVICES

The counseling staff provides educational, vocational/career, and personal/social counseling services. Counseling is available for all prospective and current students.

Counselors are available to discuss admission requirements and curriculum programs offered at the College. Prospective students meet with a counselor prior to admission. During this meeting, the counselor and student will discuss admission requirements, the student’s program of study, and course placements. Transfer credits will be evaluated by the counselor when all transcripts have been received. The counselor will also assign the student an advisor in his or her selected program of study.

Vocational/career counseling is available for students by making an individual appointment with a counselor or by visiting the Career & Transfer Resource Center (CTRC) in Wilson Building, Room C1034. Counselors can help students assess their abilities, skills, interests, values, personalities, and personal goals to make educational and career decisions. A variety of assessment tools and occupational information may be used to assist students. The JobLink Career Center can help students in obtaining employment.

In addition to educational and vocational/career counseling, counselors are available to assist students in working through personal and social issues. Students who need ongoing counseling services will be provided a list of community resources.

Students are encouraged to utilize counseling services at any point throughout their enrollment at the College.
TRANSPORTABILITY

Colleges and universities vary widely in transfer requirements for entrance into and completion of study in a major field. Students are advised to:

- Carefully study the catalogs and websites of four-year baccalaureate-level institutions to which they are considering transfer.
- Consult a four-year institution admissions representative as early as possible while enrolled at JCC to determine transferability of courses previously taken and to develop a planned course of study.

Failure to satisfy prerequisites or basic skill requirements may seriously delay progress towards the completion of a baccalaureate degree.

CAREER AND TRANSFER RESOURCE CENTER

Students who desire additional career information, including career assessment, exploration, and occupational information should visit the Career & Transfer Resource Center (CTRC) in Wilson Building, Room C1034.

Students interested in transferring to a four-year college or university should also visit the CTRC. College catalogs and additional information, such as course transfer equivalencies and college brochures, are located in the CTRC. Additional transfer information can also be found on the bulletin board outside of the Center.

Counselors are available to assist students during CTRC hours, which are posted on the bulletin board, or by appointment. Computers are available to complete online applications, to research four-year institutions, and to complete career assessments. The CTRC is to be used in addition to regular meetings with the student’s assigned faculty advisor.

DISABILITY SERVICES

The Disability Services Office helps adapt Johnston Community College’s general services to the individual and specialized needs of students who have special health conditions, disabilities, or limitations. Services are provided in accordance with Section 504 of the Rehabilitation Acts of 1973, as amended in 1998 in Part IV of the Workforce Investment Act, Perkins Vocational and Applied Technology Education Act of 1998, and the Americans with Disabilities Act of 1990. The goal is to ensure all qualified students with equal opportunity and access to programs and facilities.

Students should take the following steps:

- Any student seeking reasonable accommodations must initiate contact with the disability services coordinator to request services. It is the student’s responsibility to identify themselves in a timely manner (at least 30 days prior to the beginning of classes). Information about a student’s disability is not collected in the admissions process. Subsequently, the information a student provides regarding a disability is strictly voluntary.
- All students requesting reasonable accommodations due to a disabling condition must provide the disability services coordinator with current documentation verifying a disability. Documentation submitted must be from a qualified professional and include a clear diagnostic statement, a description of the assessment tools used to render the diagnosis, and a statement reflecting the student’s current needs and level of functioning in an educational setting. All documentation and information regarding a student’s disability is kept confidential and separate from academic records. Questions pertaining to acceptable documentation may be directed to the disability services coordinator.
- Once disability verification documentation is received, each student must schedule an interview with the disability services coordinator. During this interview, discussion will take place about the requested accommodations as well as other resources available at Johnston Community College and in the community.
- Once a student is registered with the Disability Services Office, it is the student’s responsibility to request accommodations each semester and to maintain contact with the disability services coordinator regarding any changes.

STUDENT SUPPORT SERVICES - TRIO

Johnston Community College was selected as a federal grant recipient for the Student Support Services - TRIO (SSS) program in September 2001. The SSS program provides opportunities for academic development, assists students with basic college requirements, and serves to motivate students towards the successful completion of their post-secondary education.

The goal of the SSS program is to increase the college retention and graduation rates of its participants and facilitate the process of transition from one level of higher education to the next. Student Support Services helps low-income and first generation students stay in college until they earn their baccalaureate degree. Participants, who include disabled college students, receive tutoring, counseling, mentoring, and other academic support.

FINANCIAL AID

It is the goal of the Financial Aid Office to provide all students with proven financial need the necessary funds to pay for educational expenses while attending the College.

The College financial aid program operates in accordance with the following policies and principles:

1. The purpose of financial aid is to supplement the resources of the student and family. The primary responsibility for financing education rests with the individual and the family according to income and ability to meet the
student’s educational expenses. The student is expected to share responsibility through savings and part-time employment, if necessary.

2. In considering a student for financial aid, the College considers the applicant’s financial need and potential for success in accomplishing the educational goal.

3. Aid may be used for tuition and fees, books, room and board, travel, and personal expenses necessary to maintain the student in school.

4. For the purpose of financial aid, a full time student is defined as one who is registered for 12 or more semester hours of course work or the equivalent. A part time student is one who is registered for less than 12 semester hours of course work or the equivalent.

Financial aid is awarded on an annual basis; therefore, the student must submit a new financial aid application each year.

Students who need assistance should apply to the Financial Aid Office located in the Wilson Building.

Financial Aid Resources

Federal Pell Grant

This is a federal assistance grant awarded to eligible undergraduate students who are enrolled in an eligible program. There are three ways to apply for a Pell Grant:

1. Go to www.fafsa.ed.gov to complete the Free Application for Federal Student Aid (FAFSA). JCC’s school code is 009336.

2. Call 1-800-4-FED-AID to request a paper copy of the FAFSA.

3. A PDF version of the FAFSA is available for download at www.FederalStudentAid.ed.gov.

4. Request an application by calling the Financial Aid Office at 919-209-2036 and providing your name and mailing address.

To receive the Pell award the student must be fully enrolled in a course of study, have submitted all required documents, and have a correct student aid report.

Academic Competitveness Grant (ACG)

This is a federal assistance grant awarded to eligible undergraduate students. An eligible student may receive an ACG of up to $750 for the first academic year of study and up to $1,300 for the second academic year of study. To be eligible for each academic year, a student must:

- be a U.S. citizen or eligible non-citizen
- be a Federal Pell Grant recipient during same award year
- be enrolled at least half-time in a program at least one year in length
- be enrolled in the first or second academic year of his or her program of study at a two-year or four-year degree-granting institution

- have completed a rigorous secondary school program of study (after January 1, 2006, if a first-year student, and after January 1, 2005, if a second-year student)
  - if a first-year student, not have been previously enrolled in an undergraduate program (does not count high school students)
  - if a second-year student, have at least a cumulative 3.0 grade point average on a 4.0 scale (as set forth in regulations to be promulgated soon) for the first academic year
- not have a bachelor's degree

Each applicant is required to apply for a Federal Pell Grant and be eligible.

Federal Supplemental Educational Opportunity Grant (F-SEOG)

This is a federal assistance grant awarded to eligible undergraduate students who have exceptional needs and are enrolled in an eligible program. Schools receive a limited amount of funds for the F-SEOG program; therefore, when the funds have been awarded, there will be no additional funds for the academic year. To apply, students must complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov.

Work-Study

The College participates in the College Work-Study Program. Under this program, a variety of part-time jobs are available on campus for eligible students. To apply, students must complete the Free Application for Federal Student Aid (FAFSA) and a work-study application available in the Financial Aid Office.

North Carolina Student Incentive Grant (NCSIG)

The purpose of the North Carolina Student Incentive Grant program is to provide grants to legal residents of North Carolina who qualify. To be eligible to receive the grant a student must:

- be a legal resident of North Carolina for tuition purposes
- demonstrate substantial financial need
- be a full-time student
- maintain satisfactory progress toward the completion of his or her program of study

Each applicant is also required to apply for a Federal Pell Grant. NCSIG eligibility and grant awards are determined by College Foundation, Inc. based on data from the Federal Student Aid Report. This grant is based on a limited amount of funds.
North Carolina Community College Grant

The North Carolina Community College Grant is a need-based grant established by the N.C. Legislature to provide funds to help meet the educational cost of North Carolina residents attending community colleges. Students must complete the Free Application for Federal Student Aid (FAFSA) by the published deadline and list a North Carolina Community College as one of the top three choices of institutions. The North Carolina State Education Assistance Authority in conjunction with College Foundation of North Carolina administers this program. To be eligible:
- The student must be a North Carolina resident enrolled at least half-time in an eligible program.
- The student must be meeting the Satisfactory Academic Progress requirements and the Pell eligibility requirements except for the expected family contribution requirement established by the federal government.
- The student with a bachelor’s degree is ineligible.

North Carolina Education Lottery Scholarship

The North Carolina Education Lottery Scholarship is a program established by the North Carolina General Assembly to help meet the educational costs of North Carolina residents. Students must complete the Free Application for Federal Student Aid (FAFSA).

The North Carolina State Education Assistance Authority in conjunction with College Foundation of North Carolina administers this program. To be considered for this grant, a student must be a North Carolina resident and be enrolled at least half-time (six credit hours per semester). Students with a bachelor’s degree are ineligible. The Expected Family Contribution (EFC) will determine eligibility and the amount to be received.

Scholarships

Annual scholarships are provided each year by various organizations and individuals. The College also cooperates with a number of agencies and organizations for other types of assistance. For specific information about scholarships or grants, contact the Financial Aid Office.

One source of scholarships funds is through the Johnston Community College Foundation. Scholarships are established with gifts from donors to the Foundation and are either endowed or annual. Criteria for awarding the scholarships are specified by the Foundation Board of Directors. Scholarships are awarded by a selection committee recognized by the Foundation and are administered through the Financial Aid Office. Please see the Financial Aid page on the JCC Web site for additional information.

Endowed scholarships are generated through the investment of permanently-held principals so that only the income from the principal is used for scholarship awards. Annual scholarships are those for which the identified funds are dispersed as scholarships rather than interest from long-term investments. Scholarships are subject to change without notice. This list is current as of the printing date for this publication. Students should contact the Financial Aid Office for an application regarding scholarships or consult the College Web site for the most current listing.

Named Scholarship Endowment Funds

- Dr. A. Curtis and Mary Lee Phillips Scholarship Endowment
- Allen and Cissie Wellons Hispanic Scholarship Endowment
- American Legion, Pou-Parrish Post 132 Scholarship Endowment
- Annie Batten Lee Scholarship Endowment
- Benson Lions Club Scholarship Endowment
- Burlington Industries Scholarship Endowment
- Burton W. Sugg and Rose Gordon Sugg Endowment
- C. Thelbert and Loriene L. Lancaster Family Endowment
- C. O. Heavner, Sr. Scholarship Endowment
- Carol B. Arnn Scholarship Endowment
- Carolyn Daughtry Beard Scholarship Endowment
- Charles Thomas Turlington and Charles Thomas “Chuck” Turlington, II Scholarship Endowment
- Clinton Jones Family Scholarship Endowment
- Country Music Showcase Scholarship Endowment
- David O. Proctor Scholarship Endowment
- Donnye B. Rooks Endowment
- Doris Dunn Williams Scholarship Endowment
- E. Street Jones, Sr. Scholarship Endowment
- Earl C. and Doris F. Helms Scholarship Endowment
- Edmund S. and Helen Wood Wellons Scholarship Endowment
- Edwin A. Dinsen, Jr. Family Scholarship Endowment
- Elizabeth Clark Cooper Memorial Scholarship Endowment
- Elva Fields Jones Scholarship Endowment
- Emma Jean Adams Sawyer Business & Technology Scholarship Endowment
- Ernest K. and Maude B. Ward Scholarship Endowment
- Evander S. and Ethel B. Simpson Scholarship Endowment
- First Citizens Bank & Trust Scholarship Endowment
- Floyd C. Price, Sr. Scholarship Endowment
- Four Oaks Bank and Trust Company Scholarship Endowment
- Fred Earl Brink Scholarship Endowment
- Gay Dawson Nursing Scholarship Endowment
- GlaxoSmithKline Scholarship Endowment
- Guy C. Lee Scholarship Endowment
- Haywood P. Rose Memorial Scholarship Endowment
- Henry Paul Howell Scholarship Endowment
- Hunter A. Moore Scholarship Endowment
- J. Harold Lampe Scholarship Endowment
- Jack and Cleo Austin Memorial Scholarship Endowment
- James A. Jr. and Janice F. Wellons Scholarship Endowment
- James and Ramona Cash Scholarship Endowment
- Jane Duncan Nursing Assistant Scholarship Endowment
- Jerry G. Williams Scholarship Endowment
Named Annual Scholarship Funds

- Dr. Allen H. Lee Annual Scholarship (Selma Lions Club)
- Ann and Richard Huckenbeck Annual Scholarship
- Athletics Scholarship
- Barbara Anders Hoffman Annual Scholarship
- Brian and Brenda Light Annual Scholarship
- Carl and Marjorie Lamm Annual Scholarship
- Carol B. Amn Annual Scholarship
- Charles and Bernard Tighe Annual Scholarship
- Christopher Sullivan Memorial Scholarship
- Cio’s Pizza Scholarship
- Continuing Education Scholarship
- Cost Cutters Family Hair Salon Cosmetology Annual Scholarship
- David H. Womack Memorial Scholarship
- Dixie Dames, Red Hat Society Annual Scholarship
- Doris Hughes Memorial Fund for Education Scholarship
- Elizabeth Sawrey Landscape Management/Horticulture Annual Scholarship
- Epes Transport Annual Scholarship
- Dr. Eric and Kendyl Janis Annual Scholarship
- Four Oaks Chamber of Commerce Annual Scholarship
- Freddie Price Memorial Annual Scholarship
- Gerald A. and Pamela L. Withrow Annual Scholarship
- Jack Stowers Annual Scholarship
- Jane Evans Certified Nursing Assistant Scholarship
- Janet Lucas Memorial Annual Scholarship
- Jason & Lynn Hurt “Hope” Therapeutic Massage Annual Scholarship
- Johnston Community College Black History Committee Annual Scholarship
- Johnston Community College Retirees Association Annual Scholarship
- Johnston County Farm Bureau FFA Scholarship
- Johnston County Vietnam Veterans of America Chapter 990 Annual Scholarship
- Johnston Medical & Surgical Supply Company Annual Scholarship
- Larry and Louise Stancil Family Annual Scholarship
- Lawrence L. Rouse Annual Scholarship
- Mary Frances Bingham Annual Scholarship
- Mr. and Mrs. Almond R. Warrick, Jr. Annual Scholarship
- North Carolina Association of Textile Services, Inc. and United Textile Distribution Annual Scholarship
- Performing Arts Annual Scholarship
- Princeton Police Department BLET Scholarship
- Rick Horton Academic Performance Annual Scholarship
- Rotary Club Scholars Program Scholarships
- Sawrey Family Annual Scholarship for Self-Supporting Students
- Smithfield Kiwanis Annual Scholarship
- T. Clifford Massengill Scholarship
- Talecris Scholarship
- The Carl and Marjorie Lamm Annual Scholarship (The Rotary Club of Smithfield)
- Taylor Express Annual Scholarship
• The Clayton Area Chamber of Commerce
  (Monica Carey)
• Tina Irvine Phi Theta Kappa Leadership Annual
  Scholarship
• Wayne and Sharon Thompson Therapeutic Massage
  Annual Honors Scholarship
• Whitley Early Childhood Annual Scholarship
• Dr. William Duck Memorial Annual Scholarship

**Named Special Purpose Endowment Funds**

• Cynthia DeFord Adams Literary Competition
  Endowment
• Earl C. and Doris F. Helms Excellence in Teaching
  Endowment
• Howell Woods Endowment
• John R. Windley Music Endowment

**Established Endowment Commitment Funds**

• Barbara Anders Hoffman Endowment
• Branch Banking & Trust Endowment
• Caroline Connet Memorial Endowment
• Donald L. Reichard Institute for Strategic
  Excellence Endowment
• Frank Creech Scholarship Endowment
• Dr. Henderson D. Mabe, Jr. Endowment
• Hilda Rogers Bailey Music Endowment
• J. Harold Talton Scholarship Endowment
• James Odell and Christine West Jackson
  Family Endowment
• Jesse Carlton Moore Endowment
• Kevin H. Johnson and Julie J. Hopkins Endowment
• Larry Stancil Family Endowment
• Lawrence Thomas and Maye Campbell Heavner
  Endowment
• M. Holding Charitable Trust Endowment
• Mr. and Mrs. Almond R. Warrick, Jr. Endowment
• Pam Tripp "Women in Management" Endowment
• T. Clifford Massengill Endowment
• William B. Wellons, Sr. Endowment

**Named Third Party Asset Distribution Funds**

• Johnston County Arts Council Endowment
  Distribution Purpose: Scholarship (North Carolina
  Community College Foundation)

• Johnston Community College Foundation/ Don
  and Linda Lasiter Performing Arts Fund
  Distribution Purpose: Performing Arts (The North
  Carolina Foundation for Christian Ministries)

• Johnston Community College Foundation/ R. P.
  Holding Foundation
  Distribution Purpose: Learning Resources Center (North
  Carolina Community College Foundation)

• Johnston Community College Foundation/ Madeline S.
  Peele
  Distribution Purpose: Pearl L. & David H. Stephenson
  Family Endowment (Edward Jones, Clayton)

**Nurse Education Scholarship Loan Program**

Scholarship/loan funds are available to students who are
enrolled at least half time in the associate degree or practical
nursing program. Other eligibility criteria are:

- North Carolina resident for tuition purposes.
- Demonstrated financial need as determined by the
  Federal Student Aid Application Form.
- Execution of a loan note with the North Carolina State
  Education Assistance Authority to practice full time as
  a registered nurse or licensed practical nurse in North
  Carolina following completion of the program.

The award is determined by the number of applicants and
amount of available funding. Selection is based on academic
merit and financial need. Cancellation and repayment provi-
sions apply as stated in the Nurse Education Scholarship Loan
Program guidelines.

**Nurse Scholars Program**

Nurse Scholars nominations are made by the Health Educa-
tion Department by late July of each academic year. Nurse
Scholars are selected by the North Carolina Nurse Scholars
Commission. The commission selects recipients on the basis
of academic performance, evidence of leadership, extracur-
ricular participation, and the promise of service as a registered
nurse in North Carolina. Applicants must have earned a 3.0
grade point average on a 4.0 scale in high school or on 12
semester or 18 quarter hours of previous college work. Other
eligibility criteria include:

- North Carolina resident for tuition purposes.
- Execution of a loan note with the North Carolina State
  Education Assistance Authority to practice full time as a
  registered nurse in North Carolina following completion
  of the Associate Degree Nursing program.
- Full-time enrollment in the Associate Degree Nursing
  program.

Financial need is not one of the eligibility criteria. The scholar-
ship/loan may be repaid through full-time practice as a regis-
tered nurse in North Carolina. Cancellation and repayment
provisions stated in the Nurse Scholarship/Loan program also
apply to the Nurse Scholars Program.

**Federal Family Education Loan Program**

This program includes the Federal Stafford Loans (subsidized
and unsubsidized) and Federal PLUS Loans to parents. A
subsidized loan means that the borrower is eligible for federal
interest benefits and the interest on the loan is paid by the fed-
eral government while the borrower is enrolled and attending
college. An unsubsidized loan means that the borrower must
pay the interest while attending college.

To apply, an application for Federal Student Aid must be
completed. The report is used to determine Federal Pell
Grant eligibility which must be done before applying for the
Stafford Loan. The report is also used to determine eligibility
or ineligibility for the interest subsidy.
Applications for the student loans described are available in the Financial Aid Office. Only one loan application per student will be processed for each award year. Students must be enrolled at least half-time to apply for a Stafford Loan.

Federal Stafford/Federal Unsubsidized Stafford Loans. The amount students may borrow will be determined by a number of factors, including whether they are first-year or second-year students, whether they are dependent or independent students, and whether or not they have unmet financial need. Stafford Loan entrance and exit counseling is available and is required.

Satisfactory Academic Progress

Each student enrolled in an eligible program and receiving financial aid is expected to make satisfactory academic progress toward completion requirements for the program. At the end of the semester, the student’s cumulative grade point average is computed. This measure of progress toward graduation is indicated on the student’s semester grade report and is reviewed by the College.

To be in satisfactory academic standing, a student must maintain at least a 2.0 cumulative grade point average related to the number of credit hours attempted. When the student’s GPA is computed, all courses attempted at Johnston Community College are included in the total hours attempted except remedial, WD, I, NA, CR, AU, and repeated course work (lower grade).

In addition, a student must pass at least 67-percent of the credit hours attempted each semester. At the end of each semester, the student’s cumulative 67-percent is computed. All courses attempted are included in the 67 percent calculation except remedial. This includes A, B, C, D, F, I, WF, WD, CR, AU, NA, I, repeated courses, high school courses, and transfer credits.

Financial aid students who have been on academic probation for at least two consecutive semesters and are not in satisfactory academic standing will be terminated from receiving financial aid.

The time frame for a student to complete his or her program of study cannot exceed 150 percent of the published length of the program. This 150-percent limit will be measured by all attempted credit hours. Transfer credits are included in the 150-percent calculation; however, remedial courses are not included. There is no academic probation period for the 150-percent rule. For example, if a program has 121 credit hours, the student may only attempt 181.5 credit hours before becoming ineligible to receive Title IV funds.

Other

1. Johnston Community College’s Forgiveness Policy does not apply for financial aid purposes.
2. Financial aid (Title IV) will be limited to 30 credit hours of developmental courses.
3. No financial aid (Title IV) will be awarded for AU (Audit) grades and NA (Never Attends).
4. Once financial aid is terminated, students become ineligible for aid until their progress is again satisfactory. It is the responsibility of the student to notify the Financial Aid Office when this has been accomplished.
5. A student who has become ineligible for financial aid has the opportunity to appeal. Appeals generally given consideration involve students who have experienced:
   (a) extended illness or hospitalization of the student, (b) an accident which incapacitates the student for an extended period of time, and (c) death or extended illness of an immediate family member which results in greater family responsibilities for the student. The appeal must be in writing and submitted along with proper documentation to the Financial Aid Office. If the student disagrees with the decision, he or she may appeal in writing to the vice president of student services.
6. The Financial Aid Office will mail an award letter explaining the award amount, Satisfactory Academic Progress policy, and dates of disbursement to each eligible aid recipient.

Verification Policy

1. The college verifies all eligible applicants selected by the Department of Education.
2. The Financial Aid Office completes verification at the time the student’s award is made.
3. Financial aid awards are not disbursed until verification is complete.

Return of Title IV Funds (R2T4) Policy

If a student completely withdraws from all classes prior to the 60-percent point of the semester he or she is required, by federal regulations, to repay the funds for the time he or she has not attended class. This overpayment may be a combination of tuition, fees, or books charged to his or her account and/or direct payment made to the student. Failure to make payment will result in the student being reported to the Department of Education and/or a collection agency. This action will also interrupt future financial aid awards. The student will not be able to register for classes, receive transcripts, or grade reports. To owe no funds, the student must attend at least one class on or after the 60-percent point of the semester.
VETERANS SERVICES AND CERTIFICATION

The College provides services to students in conjunction with the Veterans Administration (VA) and the North Carolina Division of Veterans Affairs (DVA) to assist military service veterans and eligible persons in securing veterans educational benefits. Veterans are provided admissions counseling and guidance in the selection of an educational program. Eligible wives, widows, and children of disabled or deceased veterans are also assisted.

For information and application forms, students should contact the veterans affairs officer in the Financial Aid Office located in the Wilson Building.

Satisfactory academic progress of students is determined by the individual’s cumulative grade point average, as defined in the “Academic Services and Procedures” section of this catalog under the “Academic Progress” heading. When a veteran or eligible person has failed to make satisfactory academic progress and has been terminated by the veteran affairs coordinator, the enrollment of the veteran or eligible person is decertified to the DVA in accordance with DVA regulations. The action leads to termination of veterans educational benefits by the DVA.

The College is required under DVA regulations to decertify the enrollment of veterans or eligible persons whose cumulative grade point average indicates that adequate progress is not being made toward meeting graduation requirements.

It should be clearly understood that the veteran or eligible person is not suspended from the College when decertification occurs and veterans’ educational benefits are terminated. The student is advised to remain in school and make every effort to attain satisfactory academic progress as soon as possible.

At the end of each semester, the student’s grade point average for the semester and cumulative grade point average are examined. Transfer credit hours are not included in computing a veteran’s academic grade point average (GPA) in his or her program at the College.

To be recertified for veterans’ educational benefits, the veteran or eligible person must bring his or her cumulative grade point average up to the standard of satisfactory academic progress as defined in the “Academic Services and Procedures” section of this catalog under the “Academic Progress” heading. When the student has attained satisfactory academic progress, the student’s enrollment will be recertified to the DVA for educational benefits.

The DVAs will not pay for the following enrollment situations at the College:

• repeating a course previously passed
• courses requiring prerequisites must be taken in appropriate sequences as designated in the “Course Descriptions” section of this catalog
• Adult High School Diploma (AHD)
• High School Equivalency (GED)
• Continuing Education

Contact the veteran affairs coordinator to ensure that all enrollment and VA document data are correct and complete. Eligible veterans/dependants must notify the coordinator each semester before certification to the DVA can be completed.

JOB PLACEMENT/CAREER SERVICES

JobLink Career Center

The Capital Area JobLink Career Center at Johnston Community College is a partnership of 11 agencies that work together to provide services to job/training seekers and employers from one convenient location. The JobLink Center offers the following services to a universal customer base, including all students and graduates:

• Assessment Services

An initial assessment of customer needs and desired services from the JobLink Center is determined during orientation to the Center. Customers can request basic assessments of career/vocational interests and skills and assistance in setting employment goals. Customers can also access a variety of self-assessment tools online. More in-depth educational, occupational skills and aptitudes assessments may be available through referral to partner agencies.

• Career Information and Guidance

Career information, in addition to limited guidance and advising, is provided as needed, or requested, to help customers explore career opportunities and associated educational requirements. A career information system providing accurate and up-to-date information on North Carolina occupations and training sites is available online. Additionally, books, periodicals, and other career guidance publications are available in the Center. More in-depth career development assistance may be offered through partner agencies.

• Electronic Services

Access to free e-mail service is available to customers for use in job search activities. Fax and copy services are available to send cover letters, resumes, and job applications to potential employers in response to electronic and hard copy job leads. Phones are available for customers to use to contact employers, inquire about applications and conduct phone interviews. The JobLink Web site (www.joblinkcc.com) provides access to many JobLink “core” services on and off-site.
• Education and Training Information
A comprehensive listing of colleges and universities within the local area, as well as the state and nation, is available online. Information on local college curricula and continuing education courses is also available. Information on classes sponsored by the JobLink Center and local community colleges is available as these classes are scheduled. Information on other training resources in the community is also made available to JobLink customers. Additionally, staff provides information on possible financial aid resources to support training needs.

• Group Services
Where practical, the Center, or its partner agencies, may provide customer assistance to participants in a group setting. Examples of these kinds of services include orientations, unemployment insurance filing, computer literacy classes, job seeking skills workshops, and support groups.

• Information Sessions
Information sessions are offered on topics that will help job seekers in obtaining their overall goals. Sessions may include: credit counseling, job transition information, training programs, Workforce Investment Act services, partner agency services and resources, etc.

• Business Days
On Business Days, individual employers come on-site to the JobLink Center to recruit qualified employees. Business Days are advertised throughout the JobLink Center and on the JobLink Web site (calendar feature) to make job seekers aware of these opportunities to network with employers.

• Job Fairs
The JobLink Career Center offers job fairs periodically to assist employers in finding qualified workers and to give job seekers the opportunity to network with employers.

• Job Listings
Information is provided on job openings in the local labor market, as well as across the state and throughout the nation, via Internet access to the JobLink Web site. Job listings are also available in job order notebooks. Job orders specifically recruiting students are posted to Johnston Community College’s Web mail.

• Job Search Assistance
Staff members assist customers with organizing their job search, preparing resumes and cover letters, identifying appropriate job leads, completing applications, and preparing for interviews as requested and/or needed.

• Labor Market Information
Labor market information is available to assist customers with career planning. This includes information on skill shortage occupations, fastest growing occupations, declining occupations, expected wages, training needed, etc.

• Resume Preparation
Customer assistance is available for organizing, formatting, and constructing an appropriate resume for job searching. Resources include WinWay Resume software, limited staff assistance, access to the JobLink resume database, and various resource materials.

• Self-Help Resources
Self-help resources for JobLink customers include computers with Internet access, WinWay Resume software, typing tutorials, Microsoft Office tutorials, a North Carolina Careers exploration system, and a variety of tools for job/training seekers. A resource library of books, catalogs, periodicals, journals, newspapers, brochures, and employment related videos are available for use in the Center.

• Spanish/Foreign Language Services
Staff are available on a limited basis to provide job search information and assistance in Spanish.

• Specialized Services
Customers can participate in programs and services tailored to meet the special needs of individuals, including the disabled; dislocated workers; veterans; older workers; and economically disadvantaged persons.

• Support Services Information/Referrals
Support services information is available to provide job seekers with information on a range of integrated services and programs to enhance their job search and employment, ensuring success in the working environment. JobLink staff members are knowledgeable of support services that may be offered through partners or other community programs or agencies to assist customers.

• Unemployment Insurance Claims
The Employment Security Commission has an assigned representative on-site at the JobLink Center to assist customers needing to file an unemployment insurance claim.

• Rapid Response Information/Assistance (Employer Service)
JobLink staff can assist employers with information on downsizing and helping their employees find other jobs. Teams of JobLink partners and JobLink staff are available to go on-site to answer questions and provide information to employers and job seekers when layoffs occur.

• Tax Credit Information (Employer Service)
Tax credit information is available to employers who hire qualified recipients who have difficulty obtaining and retaining jobs. Tax credits are available as a strategy designed to help job seekers most in need of employment gain on-the-job experience and move toward economic self-sufficiency.

• Recruitment Assistance (Employer Service)
Staff are available to assist employers in recruiting qualified workers through Business Days, job listings, job fairs, or other mutually agreed upon methods.

The JobLink Career Center is chartered by the Capital Area Workforce Development Board.
CHILD DEVELOPMENT CENTER SERVICES

The Johnston Community College Child Development Center is open to the public, but placement preference may be given to students, faculty, and staff of the College. Services will be provided to children three to five years of age during the day. The Child Development Center is an instructional laboratory for the JCC Early Childhood Education program. Contact the director for current tuition rates.

STUDENT HOUSING

Housing for students is not provided on campus. Most members of the student body live in the area and commute to the campus. Although student housing services are not provided, students who seek housing in the local area are referred to area real estate agencies and citizens who have indicated an interest in renting to students. Such referrals are made on a non-discriminatory basis.

HEALTH SERVICES

Student health services are not provided on campus. Students are expected to secure health services from their family physician, the emergency room at Johnston Health in Smithfield, or other area health service facilities.

In the event of accident or illness, the Student Services Office or the Business Office should be notified immediately. First aid is provided by College personnel in accordance with their capabilities. First aid kits are strategically located in the various campus buildings.

Students who become ill, are injured, or develop health problems requiring professional attention are referred to the emergency room of Johnston Memorial Hospital or to a local physician in accordance with the instructions given by the student or the student’s family. In an emergency situation when immediate attention is necessary, the local rescue squad will be called. A student may be taken directly to Johnston Memorial Hospital to be seen by the physician on duty in the emergency room.

Students who have significant health conditions or limitations are expected to inform instructors at the beginning of each semester and may be required to submit a Report of Health Evaluation conducted by a physician. When deemed appropriate, faculty advisors, instructors, and/or counselors are notified of students identified as having significant health conditions.

The environmental health and safety program on the campus is under the direction of the vice president of administrative services.

DRUG AND ALCOHOL POLICY

The users of drugs or alcohol may impair the well-being of all employees, the students and the public at large; drug and alcohol uses may also result in an injury or damage to College property.

Therefore, the unlawful manufacture, distribution, possession or use of a controlled substance or of alcoholic beverages shall be prohibited while on College premises or as part of any College sponsored activities.

Any student violating this policy shall be subject to disciplinary action up to and including expulsion and referral for prosecution.

Policy Provisions

Drug Usage
The College shall not differentiate between drug users, drug pushers or sellers. Any student who possesses, uses, sells, gives or in any way transfers a controlled substance to another person, or manufactures a controlled substance while on College premises or as part of any College sponsored activity shall be subject to disciplinary action up to and including expulsion and referral for prosecution. Any student who is in a state of intoxication or 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 or her actions and will be subject to disciplinary actions.

Any student convicted of violating any criminal drug statute while on College premises or as part of any College sponsored activity shall be subject to disciplinary action up to and including expulsion.

The term “controlled substance” shall mean any drug in 21 CFR 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 high potential for abuse. Such drugs shall include, but are not limited to: Heroin, Marijuana, Cocaine, PCP, “Crack”, Methamphetamine and any other hallucinogenic, narcotic, synthetic or illegally manufactured substances. They also include “legal drugs” which are not prescribed by a licensed physician.

The College shall not differentiate between drug users, drug pushers or sellers. Any student who possesses, uses, sells, gives or in any way transfers a controlled substance to another person, or manufactures a controlled substance while on College premises or as part of any College sponsored activity shall be subject to disciplinary action up to and including expulsion.

Any student convicted of violating any criminal drug statute while on College premises or as part of any College sponsored activity shall be subject to disciplinary action up to and including expulsion.

The Vice President of Students Services may require the student to successfully finish a drug abuse program sponsored by an approved private or governmental institution as a precondition for continued enrollment at the College.

Each student shall be required to inform the Office of the Vice President of Student Services, in writing, within five (5) days after being convicted for violation of any federal, state or local criminal drug statute where such violation occurred while on College premises or as part of any College sponsored activity. A conviction shall mean a finding of guilt (including a plea of no contender) or the imposition of a sentence by a judge or jury in any federal or state court.

Federal Grant Provisions
Students employed under the College Work Study Program shall be considered to be employees of the college, if the work is performed for the college. In addition, for work performed for federal, state or local public agency, a private nonprofit agency or a private for-profit company, students shall be considered to be employees of the College unless the agree-
ment between the College and the organization specifies that the organization is considered to be the employer. Students considered employees of the College should refer to the Drug and Alcohol Policy 2.17 in the College’s Personnel Manual.

Additional information regarding the laws and penalties for illegal use as well as abuse, addiction and prevention information can be found on the college’s website under Consumer Information at http://www.johnstoncc.edu/consumerinformation.aspx.

STUDENT RECORDS

Upon receipt of the application for admission from a prospective student, a student record file is established by the Admissions Office. It is the policy of the College that this student record file shall be used throughout the student’s enrollment to collect and maintain pertinent basic data relative to the individual’s admission and academic progress.

The contents of the student record file are as follows: application for admission, transcripts of the student’s previous educational records, placement test results, summaries of admissions and academic progress interviews, medical history records, residency questionnaire, and correspondence related to admission and academic progress. The contents of the student record file are the property of Johnston Community College and are maintained in accordance with the Family Educational Rights and Privacy Act of 1974.

TRANSCRIPTS

Upon written request of the student, an official transcript of a student’s educational record will be provided by the Registrar’s Office to the student or to other institutions, individuals, firms, or agencies. There is no charge for the first transcript. Additional transcripts are $1 each. A 24-hour notice is required for preparation of transcripts. Transcripts are not released until all financial obligations to the College have been paid in full and the student’s account is cleared with the Business Office.

STUDENT RIGHT TO KNOW ACT

The Student Right to Know Act requires Johnston Community College to disclose information about graduation, completion, and transfer-out rates to current and prospective students and the public. This information is provided to students and prospective students in “The College” section of this catalog under the “Performance Measures Results” heading, through the College Web site, from the Office of Student Services, and in other publications.

EDUCATIONAL RIGHTS AND PRIVACY

The Family Educational Rights and Privacy Act of 1974 (FERPA) sets forth requirements designed to protect the privacy of student educational records. Johnston Community College recognizes the rights and privacy afforded to students with respect to their education records.

Educational records are those records, files, documents, and other materials which contain information directly related to students, and are maintained by the College, except those records which FERPA excludes as educational records. These are official college records, and as such, remain the property of the College. Information contained in the educational records will be fully explained and interpreted to students upon request. Students have the right to review only their own record. When a record contains information about more than one student, disclosure cannot include information regarding other students.

An eligible student, which means a student who has reached 18 years of age or is attending an institution of postsecondary education, has access to his or her educational records and these records shall be open to revise only as indicated by FERPA and upon the terms and conditions established by the College.

The rights afforded to students by FERPA include:

1. The right to inspect and review the student’s education records within 45 days of the day the College receives a request for access. Students should submit to the registrar, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed. The College is not required to provide copies of records unless, for reasons such as great distance, it is impossible for the student to review the records. The College may charge a fee for copies.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate or misleading. Students may ask the College to amend a record that they believe is inaccurate. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

Note: The College is not required to consider requests for amendment under FERPA that seek to change a grade, unless the grade was recorded inaccurately, seek to change disciplinary decisions, or seek to change the opinions or reflections of a College official or other person reflected in an education record.

3. The right to consent of disclosures of personally identifi-
able information contained in the student’s education records, except to the extent FERPA authorizes disclosures without consent.

FERPA allows for the release of student records without written consent of the student under the following conditions:

- To school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including security personnel); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting other school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.

- To officials of other institutions where the student intends to enroll.

- To authorized representatives of the Comptroller General of the United States, the Attorney General of the United States, the Secretary of U.S. Department of Education, or state and local authorities.

- In connection with the student’s application for and receipt of financial aid.

- To state and federal officials, authorities, and agencies specifically exempted from the prior consent requirements by this Act.

- To organizations conducting studies for, or on behalf of, educational agencies or institutions.

- To accrediting organizations to carry out their accrediting functions.

- To parents of a student who have established that student’s status as a dependent according to section 152 of the Internal Revenue Code of 1986.

- To comply with a judicial order or lawfully issued subpoena.

- In connection with a health or safety emergency when knowledge of the information is necessary to protect the health or safety of the student or other individuals.

- Of final results of any disciplinary proceedings conducted by the College against alleged perpetrators of a crime of violence or non-forcible sex offense to the alleged victim of that crime.

- To the student.

- To a parent of a student at the College regarding the student’s violation of any federal, state, or local law, or of any rule or policy of the institution, governing the use or possession of alcohol or a controlled substance if the College determines that the student has committed a disciplinary violation with respect to that use or possession and the student is under the age of 21 at the time of the disclosure to the parent.

- Is information the College has designated as directory information. Johnston Community College has designated the following information as directory information: the student’s name, major field of study, dates of attendance, enrollment status, photographs, and degrees and graduation honors received. Students, who do not wish any or all of this information to be released, must notify (in writing) the Office of the Registrar during the first 10 days of the semester. The College assumes that the failure on the part of any student to file a request for nondisclosure indicates approval for disclosure. Questions or further information on this policy can be directed to the registrar.

4. The right to file a complaint with the Family Policy Compliance Office, U. S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5920, concerning alleged failures to comply with the requirement of FERPA.
The student body of Johnston Community College is similar in many respects to a cross section of the adult population in the local area, from which most of the members of the student body come. In varying degrees student life typically centers around four major areas of interests: formal course work as a community college student; home, family, and community commitments; employment obligations for those who hold part-time or full-time jobs; and cocurricular student activities.

Cocurricular activities are organized by students in response to student interests and needs and are recognized as a significant dimension of the educational experience. In addition to student government, cocurricular activities typically consist of athletic activities, cookouts, student clubs and organizations, social events, and other activities.

Cocurricular activities provide additional learning experiences beyond the formal classroom setting for all who choose to become involved. These experiences include development of leadership skills through participation in student organizations and working together with fellow students on social, recreational, and community service projects.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association exists to promote good relations and understanding among students, administration, faculty, and trustees; to unify the student body in the development of self-government and good citizenship; and to set high ethical standards for students through responsible conduct.

The SGA is the primary campus student organization. Duly constituted to represent the interest of students, the SGA gives direction to student life beyond the classroom. It is responsible for developing and administering the annual Student Activities Fund budget that supports the student activities program.

JOHNSTON COMMUNITY COLLEGE
STUDENT GOVERNMENT ASSOCIATION
CONSTITUTION

Preamble

We, the students of Johnston Community College, in order to promote good relationships and understanding among the students, administration, faculty, and trustees; to unify the student body in the development of self government and good citizenship; and to set a high level of standards for our school through responsible conduct, do hereby establish this Constitution for the government of students of Johnston Community College.

Article I. Name

Section 1.

This organization shall be known as the Johnston Community College Student Government Association.

Article II. Membership

Section 1.

The membership of the Association shall consist of all curriculum students who pay student activity fees. Continuing education students may elect to join by paying the appropriate student activity fee.

Article III. Executive Branch

Section 1.

The executive branch shall be composed of six executive officers and an executive council made up of the executive officers and the chairpersons of all standing committees.

Section 2.

The executive officers of the Association shall be the president, vice president, secretary, assistant secretary, treasurer, and parliamentarian, each of whom shall be elected by a simple majority of the members of the Association voting in a general election held annually in the spring semester.

The requirements for being elected to an executive office and continuing to hold that office throughout the term of office shall be as follows:

1. Be a full time curriculum student;
2. Be in good standing academically and otherwise;
3. Be enrolled as a full time curriculum student for at least one semester prior to nomination.

A. The term of office for all executive officers shall be one year beginning with their election in the spring semester and ending in the following semester when the officers for the next year take the oath of office. No office may be held for more than one term by the same individual. The oath of office will be administered within 30 days of the election.

B. The duties of the office of president shall be as follows:

1. To administer and uphold the Constitution of the Association, its bylaws, and laws enacted by the senate.
2. To call and preside at meetings of the executive council, the senate, and the student body.
3. To nominate chairpersons and members of all standing committees whose names then are submitted to the senate for approval.
4. To appoint any additional committees necessary to carry out executive functions, subject to approval of the senate.
5. To issue orders to all committees and to require reports from them.
6. To serve as a member of the College Board of Trustees, as provided for in the North Carolina General Statutes 115D.
7. To represent the student body by serving as a member of the College Advisory Council.
8. To be the official representative of the College on all other occasions and at functions wherein participation is appropriate.

C. The duties of the office of vice president shall be as follows:
   1. To assist the president in any way required by the president.
   2. To fulfill the duties of the president in the case of illness or absence of the president.
   3. To assume the office of president and to carry out the duties of the office for the remainder of the term in the event that the president resigns or is unable to fulfill the duties of the office for any reason.
   4. To serve as chief justice of the judicial branch and to preside over all meetings and court sessions of the judicial branch.

D. The duties of the office of secretary shall be as follows:
   1. To accurately record and preserve the minutes of all regular and special meetings of the Association.
   2. To be in charge of all necessary paperwork required by the executive officers, the executive council, and the senate.
   3. To submit periodic reports to the membership or the Association, the advisor, and the College concerning the progress and actions taken by the Association.
   4. To prepare and keep a record of all actions, bylaws, statutes, and resolutions of the senate.

E. The duties of the office of assistant secretary shall be as follows:
   1. To assist the secretary in any way required by the secretary.
   2. To fulfill the duties of the secretary in the case of illness or absence of the secretary.
   3. Assume the office of secretary and to serve for the remainder of term in the event.

F. The duties of the office of treasurer shall be as follows:
   1. To keep an accurate record of financial actions of the Association based on financial reports prepared monthly by the College Business Office.
   2. To serve as chairperson of the Finance Committee which is responsible for submitting budget recommendations.
   3. To report periodically to the Association or at any time required.
   4. To prepare and submit to the Association an annual financial report.

G. The duties of the office of parliamentarian shall be as follows:
   1. To assist the president in maintaining order in accordance with parliamentary procedure at meetings of the senate, the Association, and the student body.
   2. To serve as advisor to the president and the executive council on matters involving parliamentary procedure.

Section 3.
The executive council shall consist of the six elected executive officers and the appointed chairpersons of the standing committees named in Article VII.

A. The duties of the executive council shall be as follows:
   1. To propose legislation to be brought before the senate. Members of the senate may also propose legislation.
   2. To hear reports from and to consult with chairpersons of committees concerning proposals, plans, progress, activities of committees.
   3. To nominate members of the judicial branch and Disciplinary Review Committee.
   4. To appoint students to serve on College advisory committees.

B. The executive council shall meet once every two weeks for the purpose of conducting business. Special meetings may be called by the president, vice president in the absence of the president, or by a majority of the members of the executive council.

Article IV. Legislative Branch

Section 1.
The legislative branch shall consist of a senate composed of the six elected executive officers and those students elected to serve as senators to represent the students enrolled in the various degree, diploma, and certificate curriculum programs operation on campus.

Section 2.
There shall be two senators elected from each program. Additional senators shall be elected from each program on the basis of one for each 20 students, or major fraction thereof, above the first 20 students in that program.

Section 3.
The senate shall hold one regular meeting each month. Special meetings may be called by the president, vice president in the absence of the president, or by a majority of the members of the executive council. A quorum of three executive officers and seven senators is required to conduct official business.

Section 4.
The senate shall have the following legislative powers and duties:
A. To conduct student government business by passage of motions by a simple majority vote of the members present at duly constituted meetings of the senate.
B. To formulate and approve the annual budget of the student activity fund.
C. To approve amendments to the annual student activity fund budget, as may be necessary from time to time during the year.

D. To authorize, appropriate, and approve the expenditure of available contingency funds included in the budget.

E. To appropriate funds from the student activity fund for the following purposes:
   1. Student publications.
   3. Extracurricular activities conducted by the Student Government Association.

F. To approve or reject by a majority vote all appointments made by the president of the Association.

G. To establish laws governing student government by passage of legislative acts by a two thirds majority vote of the members of the state.

H. To approve rules and regulations governing the conduct of all elections.

I. To formulate articles of impeachment, to conduct impeachment proceedings, and to remove from office any elected student government official duly impeached for failure to fulfill the duties of the office held. All actions of any kind dealing with impeachment of elected officials shall be subject to a two thirds majority vote of the senate.

J. To remove and replace any committee chairperson or member who is found to have failed to fulfill assigned duties.

K. To require reports from all committees and other organizations subject to control by the Association.

L. To initiate official actions deemed necessary and proper to promote the general welfare of the student body.

M. To elect a president and vice president to fulfill the regular term of office should both offices become vacant at the same time.

N. To elect a vice president, secretary, assistant secretary, treasurer, or parliamentarian to complete the term of office should any of these offices become vacant during a regular term of office.

O. To elect by a simple majority vote the justices nominated by the executive council.

Article V. Judicial Branch

Section 1.
The powers of the judicial branch shall be to interpret the Student Government Constitution and legislative acts when called upon to do so.

Section 2.
The judicial branch shall consist of seven members. The director of student activities shall serve as an ex officio member.

Article VI. Elections

Section 1.
Standing committees shall be established to perform specific functions of student government. The following standing committees shall be appointed by the senate to perform functions in the areas indicated: (1) elections, (2) social, (3) student activities, (4) finance, (5) constitution, and (6) evening student relations.

Section 2.
Each standing committee shall meet three times per year or more frequently as necessary to carry out the duties of the committee. Committees shall present all proposals to the senate for approval by the senate.

Article VII. Standing Committees

Section 1.
Standing committees shall be established to perform specific functions of student government. The following standing committees shall be appointed by the senate to perform functions in the areas indicated: (1) elections, (2) social, (3) student activities, (4) finance, (5) constitution, and (6) evening student relations.

Section 2.
Each standing committee shall meet three times per year or more frequently as necessary to carry out the duties of the committee. Committees shall present all proposals to the senate for approval by the senate.

Article VIII. Amendments

Section 1.
Proposed amendments to this constitution shall be submitted to the senate for initial consideration. In order for a proposed amendment to be submitted to the membership for approval, the proposed amendment must first receive a two thirds affirmative vote of the members of the senate. Proposed amendments must then be approved by an affirmative vote of a simple majority of the eligible members voting in a general student body referendum which must be announced at least two weeks prior to the date of the referendum.

Article IX. Ratification

Section 1.
An amendment shall become part of this constitution immediately upon ratification by the senate following the referendum. An affirmative vote by a simple majority of the senate shall constitute ratification of any amendment previously approved by a majority of the voters in a general student body referendum.

Article X. Approval

Section 1.
Constitutional amendments, legislative acts, motions, rules, regulations, and other actions passed by the Association are
subject to the approval of the College administration and the Board of Trustees.

Ratified May 3, 1977
Amended April 10, 1984
Amended May 21, 1985
Amended March 28, 2007

STUDENT ACTIVITIES AND LIFE

II. STUDENT RIGHTS

B. A.

II. STUDENT RIGHTS

A. 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.

B. 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.

C. Students have the right to freedom of expression, inquiry, and assembly without restraint or censorship subject to reasonable and non-discriminatory rules and regulations.

D. 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.

E. 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 expulsion.

F. 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.

G. The Student Right To Know Act requires Johnston Community College to disclose information about graduation, completion, and transfer-out rates to current and prospective students and the public. This information is provided to students and prospective students in “The College” section of this Catalog under the “Performance Measures Results” heading, through the College Web site, from the Office of Student Services, and in other publications.

III. 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 act of enrollment at Johnston Community College indicates acceptance by the student of published rules and policies of the College. 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 prohibiting certain types of student behavior. Violation of one or more of the following regulations may result in one of the sanctions described in Section V. Prohibited conduct shall include, but not be limited to:

A. Academic dishonesty involving taking or acquiring possession 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 beverages or being in a state of intoxication on the College campus or at College sponsored or supervised functions off-campus or in College owned vehicles. Possession, use or distribution of any illegal drugs, except as expressly permitted by law. 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 or her actions.

D. Disorderly, lewd, or indecent conduct, including public physical action, openly offensive or profane language, excessive noise, excessive displays of affection toward another person, or distribution of obscene or libelous written material.

E. Mental or physical abuse of any person on College premises or at College sponsored or 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 an 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 in 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 or 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. Violation 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; making a knowingly false statement, either orally or in writing, to a College official.

P. Failure to comply with instructions of College officials acting in performance of their duties, including failure to provide student ID in a timely manner when requested.

Q. Violations 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.

T. Violation of the College’s Information Technology Acceptable Use Policy.

U. Use of cell phones, pagers or other electronic devices while attending class or participating in class-related activities (i.e. labs, clinicals, etc.) without prior approval of the instructor. These devices must be silenced before entering the classroom or during participation in a class-related activity.

IV. DISCIPLINARY PROCEDURES

A. Immediate Suspension

If an act of misconduct threatens the health or well being of any member of the academic community or seriously disrupts the function and good order of the College, an instructor or administrative officer may direct the student(s) involved to cease and desist such conduct and
advise them that failing to cease and desist will result in immediate suspension. If the student(s) fails to cease and desist, the instructor may then suspend the student(s) from the class. An administrative officer may suspend the student(s) from either the class or the College until a resolution of the matter can be made.

The instructor or administrative officer invoking such suspension shall notify the vice president in writing of the individual(s) involved and the nature of the infraction as soon as possible but no more than two days following the incident. The vice president shall resolve the matter in a timely fashion utilizing the steps outlined below in Section IV, C.

B. Responsibility for Implementation
   The vice president/designee is responsible for implementing student discipline procedures.

C. Disciplinary Procedures
   In order to provide an orderly procedure for handling student disciplinary cases in accordance with due process and justice, the following procedures will be followed:
   
   I. Charges: Any administrative official, faculty member, or student may file charges with the vice president against any student or student organization for violations of College regulations. The individual(s) making the charge must complete a charge form (available from the office of the vice president or the College’s Web site) stating:
      a. name of the student(s) involved,
      b. the alleged violation of the specific Code of Conduct,
      c. the time, place, and date of the incident,
      d. names of person(s) directly involved or witnesses to the infractions,
      e. any actions taken that relate to the matter,
      f. desired solution(s).
   The completed charge form should be forwarded directly to the vice president.

   2. Investigation and Decision: Within five working days after the charge is filed, the vice president/designee shall complete a preliminary investigation of the charge and shall schedule a meeting with the student to discuss the alleged infraction. The vice president/designee may act as follows:
      a. Drop the charges.
      b. Impose a sanction consistent with those shown in Section V.
      c. Refer the student to a College office or community agency for services.

   3. Notification: The decision of the vice president/designee shall be presented to the student orally or in writing immediately following the meeting with the student. In instances where the student cannot be reached to schedule an appointment with the vice president/designee or where the student refuses to cooperate, the vice president/designee shall send a certified letter to the student’s last known address providing the student with a list of the charges, the vice president’s decision, and instructions governing the appeal process (Section VI).

V. SANCTIONS
   The Student Code of Conduct sanctions are listed below. The list does not imply an order or sequence of sanctions. The sanctions in each case will be determined by the factors related to the specific cases. Sanctions include the following:
   
   A. Verbal Warning: A verbal warning that specific behavior/condition will not be continued or repeated or further disciplinary action will be taken.

   B. Reprimand: A written communication which gives official notice to the student that any subsequent offense against the Student Code of Conduct will carry heavier penalties because of this prior infraction.

   C. General Probation: An individual may be placed on general probation when involved in a minor disciplinary offense. General probation has two important implications: the individual is given a chance to show capability and willingness to observe the Student Code of Conduct without further penalty; secondly, if the individual errs again, further action will be taken. This probation will be in effect for no more than two semesters.

   D. Restrictive Probation: Restrictive probation results in the loss of good standing and becomes a matter of record. Restrictive conditions may limit activity in the College community. Generally the individual will not be eligible for initiation into any local or national organization and may not receive an academic award or other honorary recognition. The individual may not occupy a position of leadership or responsibility with any College or student organization, publication, or activity. This probation will be in effect for not less than two semesters. Any violation of restrictive probation may result in immediate SUSPENSION.

   E. Restitution: Paying for damaging, misusing, destroying, or losing property belonging to the College, College personnel, or students.

   F. Interim Suspension: Exclusion from class and/or other privileges or activities as set forth in the notice until a final decision has been made concerning the alleged violation.

   G. Loss of Academic Credit or Grade: Imposed as a result of academic dishonesty.

   H. Withholding the Transcript, Diploma, or Right to Register or Participate in Graduation Ceremonies: Imposed when financial obligations are not met. (Will not be allowed to register until all financial obligations are met.)

   I. Suspension: Exclusion from class and/or all other privileges or activities of the College for a specified period of time. This
sanction is reserved for those offenses warranting discipline more severe than probation or for repeated misconduct. Students who receive this sanction must get specific written permission from the vice president before returning to campus.

J. Expulsion: Dismissing a student from campus for an indefinite period resulting in losing student status. The student may be readmitted to the College only with the approval of the president.

K. Group Probation: This is given to a College club or other organized group for a specified period of time. If group violations are repeated during the term of the sentence, the charter may be revoked or activities restricted.

L. Group Restriction: Removing College recognition during the semester in which the offense occurred or for a longer period (usually not more than one other semester). While under restriction, the group may not seek or add members, hold or sponsor events in the College community, or engage in other activities as specified.

M. Group Charter Revocation: Removal of College recognition for a group, club, society, or other organizations for a minimum of two years. The re-chartering of a group/club must be approved by the College president.

VI. APPEALS PROCEDURE

A student who disagrees with the decision of the vice president may request a hearing before the Disciplinary Review Committee. This request must be submitted in writing to the vice president within three working days after receipt of the vice president’s decision. The vice president shall refer the matter to the Disciplinary Review Committee together with a report of the nature of the alleged misconduct, the name of the complainant, the name of the student against whom the charge has been filed, and the relevant facts revealed by the vice president’s investigation.

A. Committee Composition

   Membership of the Disciplinary Review Committee shall be composed of the following:

1. Three faculty/staff members appointed by the president of the College.
2. Three student members appointed by the Student Government Association and approved by the president of the College.
3. The president will appoint one administrator to serve as committee chairperson who will vote only in case of a tie.
4. The vice president as an ex officio non voting member.
5. Committee members will serve a two-year term, beginning in January and ending in December. Replacements will be appointed by the president or SGA if necessary.

B. Procedure for Hearings Before the Disciplinary Review Committee

1. Procedural responsibilities of the vice president: The Review Committee must meet within 10 working days of receipt of a request for a hearing. At least five working days prior to the date set for the hearing, the vice president shall send a certified letter to the student’s last known address providing the student with the following information:
   a. A restatement of the charge or charges.
   b. The time and place of the hearing.
   c. A statement of the student’s basic procedural rights.
   d. A list of witnesses.
   e. The names of committee members.

2. Basic procedural rights of students include the following:
   a. The right to counsel. The role of the person acting as counsel is solely to advise the student. The counsel shall not address the committee.
   b. The right to produce witnesses on one’s behalf.
   c. The right to request, in writing, the president to disqualify any member of the committee for prejudice or bias. (The request must contain justification.) A request for disqualification, if made, must be submitted at least three (3) working days prior to the hearing. If such disqualification occurs, the appropriate nominating body shall appoint a replacement to be approved by the president.
   d. The right to present evidence.
   e. The right to know the identity of the person(s) bringing the charge(s).
   f. The right to hear witnesses on behalf of the person bringing the charges.
   g. The right to testify or to refuse to testify without such refusal being detrimental to the student.
   h. The right to appeal the decision of the committee to the president who will review the official record of the hearing. The appeal must be in writing and must be made within five working days of the completion of the hearing.

3. The Conduct of the Committee Hearings
   a. Hearings before the committee shall be confidential and shall be closed to all persons except the following:
      1) The student.
      2) Counsels.
      3) Witnesses who shall:
         i. Give testimony singularly and in the absence of other witnesses.
         ii. Leave the committee meeting room immediately following completion of the testimony.
   b. The hearing will be tape-recorded. Tapes will be used for transcription purposes and will be erased once a written record of the hearing is established.
   c. The committee shall have the authority to adopt supplementary rules of procedure consistent with this code.
   d. The committee shall have the authority to render
written advisory opinions concerning the meaning and application of this code.

e. Upon completion of a hearing, the committee shall meet in executive session to determine concurrence or non-concurrence with the original finding and to recommend sanctions if applicable.
f. Decisions of the committee shall be made by majority vote.
g. Within two working days after the decision of the committee, the vice president shall send a certified letter to the student’s last known address providing the student with the committee’s decision.

C. Appeal to the President
A student who refuses to accept the findings of the committee may appeal in writing to the president within five working days after receipt of the committee’s decision. The president shall have the authority to:

1. Review the findings of the proceedings of the committee.
2. Hear from the student, the vice president, and the members of the committee before ruling on an appeal.
3. Approve, modify, or overturn the decision of the committee.
4. Inform the student in writing of the final decision within 10 working days of the receipt of the appeal.

VII. STUDENT GRIEVANCE PROCEDURE
A. Purpose
The purpose of the student grievance procedure is to provide a system to channel student complaints against faculty and staff concerning the following:

1. Alleged discrimination on the basis of race, color, age, national origin, religion, disability, sex, covered veteran status or other conditions, preferences or behavior, excluding sexual harassment complaints.
2. Sexual harassment complaints should be directed to the vice president. Because of the sensitive nature of this kind of complaint, a conference with the vice president will replace the first and second step of the grievance procedure. The vice president will counsel with the student to determine the appropriate action. If the grievance is not resolved after this meeting, then the remainder of the grievance procedure will be followed.
3. Academic matters, excluding individual grades and attendance, except where the conditions in items A above apply.

B. Procedure
1. First Step
   The student must go to the faculty or staff member where the alleged problem originated. An attempt will be made to resolve the matter equitably and informally at this level. The conference must take place within five working days of the incident which generated the complaint.

2. Second Step
   If the complaint is not resolved at the informal conference with the faculty or staff member, the student should meet with the faculty member’s department chair or staff member’s direct supervisor within ten (10) working days after satisfying step 1. As part of the effort to resolve the issue, the department chair or supervisor will consult with the individual who the complaint is directed toward and the chief administrative officer of that division.

3. Third Step
   If the complaint is not resolved at the informal conference with the department chair or direct supervisor, the student may file a written grievance with the Vice President of Student Services. The completed grievance form may be obtained from the office of the Vice President of Student Services. The completed grievance form and the reason why the response of the department chair or supervisor was unsatisfactory must be presented to the office of the Vice President within five (5) working days after satisfying Step 2.

   The vice president shall immediately notify the president who shall insure that the committee is organized in a manner consistent with Section C of this procedure (The Student Grievance Committee). The vice president will send copies of the appeal to the members of the committee, the employee, and the employee’s supervisor. The employee against whom the grievance was filed shall be given an opportunity to respond in writing to the chairperson of the committee.

   Meeting(s) shall be conducted between five (5) and fifteen (15) working days following the date of the request. A postponement may be granted by the chairperson upon written request of either party if the reason stated justifies such action.

   The committee shall hold interviews with the grievant, the employee, and the supervisor, singularly, and in the absence of other witnesses. The committee may interview any additional witnesses that it considers necessary to render a fair decision.

   The committee shall decide by a majority vote the resolution of the grievance. In case of a tie, the chairperson will vote, thus breaking the tie. The chairperson shall forward a copy of the committee’s decision to all parties involved and to the Office of the President of the College within two working days.

4. Fourth Step
   The committee’s decision may be appealed to the president of the College within three (3) working days of the committee’s decision by either party involved. The president shall review the committee’s findings, conduct whatever additional inquiries deemed neces-
Formalized participation is provided in the following ways:

practice of an open-door policy.

vided through formalized structures and the administration's

fullest extent possible. Opportunities for participation are pro

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The College expects:

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Faculty and students at Johnston Community College have the

right to a classroom environment that is conducive to study,

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behavior which threatens such an atmosphere and disrupts

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fear and intimidation of a student or faculty member will not

be tolerated. Students may be removed from the classroom if

their behavior is determined to be detrimental to the learning

environment. Further suspension from the class or the college

will be administered in accordance with the student code of

conduct.

The College expects:

• classrooms where students arrive and depart on time
• classrooms where there is no disruptive behavior
• classrooms where the rights of others are respected and
  where students treat each other with civility and respect

CLASSROOM CONDUCT

Faculty and students at Johnston Community College have the

right to a classroom environment that is conducive to study,

expression, and full concentration on study topics. Student

behavior which threatens such an atmosphere and disrupts

learning and teaching activities or creates an environment of

fear and intimidation of a student or faculty member will not

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their behavior is determined to be detrimental to the learning

environment. Further suspension from the class or the college

will be administered in accordance with the student code of

conduct.

The College expects:

• classrooms where students arrive and depart on time
• classrooms where there is no disruptive behavior
• classrooms where the rights of others are respected and
  where students treat each other with civility and respect

PARTICIPATION IN COLLEGE GOVERNANCE

Johnston Community College encourages its students to

participate in the College's decision-making processes to the

fullest extent possible. Opportunities for participation are pro-

vided through formalized structures and the administration's

practice of an open-door policy.

Formalized participation is provided in the following ways:

a. The Student Government Association president serves as
  an ex-officio member of the Board of Trustees (ex-officio
  status accords the SGA president all rights as other trustees
  except the voting privilege).

b. Student representatives serve on several standing committees.

c. Student representatives serve on the College's planning
  team when it conducts the strategic planning phase of
  the planning cycle and participates in the development of
  operational plans during the operational planning phase
  of the planning cycle for such areas as the SGA, student
  activities, ambassadors' program, etc.

d. When appropriate, student representatives serve on Col-
  ledge ad hoc committees.

e. The president meets with the SGA senate on a
  bimonthly basis to discuss how the College can best meet
  student needs.

f. Students may appeal decisions made by faculty and staff
  through the College's appeals procedure.

The College's administration practices an open-door policy.

Students may, as individuals or groups, present ideas for

improvement or concerns to the appropriate administrator or

president at any time. The College administration will respond

to such input in a timely manner.

The College believes it can only achieve excellence by the full

participation of those it serves, the students, in institutional

decision-making.

STATEMENT ON OPEN MEMBERSHIP IN
STUDENT ORGANIZATIONS

It is the policy of the College that membership in student

organizations is open to all eligible students in accordance with

the bylaws of the various student organizations. Discrimination

in admission to membership in student organizations on the

basis of race, color, sex, disability, age, religion, national origin

or covered veteran status is specifically prohibited.

The College is an equal opportunity institution and is com-

mitted to full compliance with all federal laws and regulations

prohibiting discrimination.

CLUBS AND ORGANIZATIONS

Student clubs and interest groups are encouraged as a

means of developing common bonds or purpose and friend-

ship between students with similar occupational and academic

interests. Faculty members serve as advisors and assist

student leaders in planning club programs and developing

group activities.

Student organizations on campus include Student Ambassa-

dors, a chapter of Phi Beta Lambda business fraternity; a chap-

ter of Phi Theta Kappa, International Honor Society of the

Two-Year College; National Vocational and Technical Honor

Society; Literary Guild; Rotaract, a globally-focused service

club sponsored by Rotary International; and clubs for students

in Advertising and Graphic Design, Associate Degree Nursing

(Integrated), Cosmetology, Criminal Justice, Early Childhood
Education, Greenhouse and Grounds Maintenance, Medical Assisting, Medical Sonography, Paralegal, Radiographic Technology, and Therapeutic Massage.

Membership in student clubs and organizations is open to eligible curriculum students regardless of race, color, sex, disability, age, religion, national origin, or covered veteran status.

**RECREATIONAL ACTIVITIES**

Informal recreation is part of the student activities program. Recreational activities are organized by students in response to student interest and needs and are supported by the student activity fund.

Students are encouraged to organize and participate in various recreational activities. Equipment may be checked out at the office of the director of student activities.

**Intercollegiate Athletics**

Intercollegiate athletics at Johnston Community College strives to provide a competitive athletic program that is consistent with the college’s mission and a total educational experience for its student-athletes. The underlying assumption that athletics contributes to the overall development of character, sportsmanship, leadership, integrity and responsible decision-making is consistent with the college’s mission to assist all students in developing their full potential for participation in a global workforce and life-long learning experiences.

The athletic program, at all times, adheres to the tenets of fair play and amateur athletic competition as defined by National Junior College Athletic Association (NJCAA). The College also holds its coaches, administrators, and student-athletes to a high standard of sportsmanship and ethical conduct. College athletics may include golf, basketball and volleyball, depending on student interest and facilities availability.

**TRAFFIC AND PARKING REGULATIONS**

Traffic regulations of the State of North Carolina are applicable to all persons who drive a motor vehicle on the campus. Student parking is provided in designated areas of the campus. Reserved parking is provided in other designated areas for visitors, handicapped persons, faculty, and staff members.

Enforcement of traffic and parking regulations and penalties for violations are administered by the Business Office.

**PARKING PERMITS**

A parking permit is provided to each student. Students should obtain a parking permit from the Information Desk in the Wilson Building. The parking permit is valid from August to August.

**MINORS ON CAMPUS**

College policy does not allow minors to be left unattended in vehicles or on campus, or brought to class. Although minors may accompany parents or guardians to the campus during registration and other appropriate times, minors are not allowed on campus unattended while parents are attending class. The practice of bringing minors to class is a potential disruption for others and places the College in a position of liability. Students bringing minors to class, the Library, or during any inappropriate time will be asked to leave.

**STUDENT PUBLICATIONS**

Student publications, either by an individual or student organization, must be approved through the appropriate organization advisor and the vice president of student services before production and distribution. The “Publications Guidelines” for College publications contained in the Johnston Community College Operational Policies and Procedures Manual must be followed if the student publication meets the criteria for a “public document.”

Student publications must not be in conflict with the Student Code of Conduct as published in this section of this catalog.

**STUDENT LOUNGE**

The Student Lounge provides a convenient place for relaxation, conversation, and a break between classes. Sandwiches, coffee, soft drinks, and other food items are available in the lounge. Vending machines are also available at various locations on the campus. Non-students are not allowed to use the Student Lounge without permission of the administration. ID cards are checked on a random basis.

**STUDENT IDENTIFICATION CARD**

The student identification card (ID card) is provided to each student and is made in the college Library. Students need a driver’s license and a copy of their current class schedule in order to obtain an ID card. Each semester a student should take his or her ID card to the Library to receive a validation sticker for the current semester. There is a $5 replacement fee for lost cards.

The student ID card serves as the college Library card and no materials will be issued without one. The card is also required for student functions on campus. Students should carry their ID card with them at all times. Campus Security or a College official may ask a student to show his or her ID at any time while on campus or at any activity sponsored by the school off campus.
STUDENT DRESS RECOMMENDATIONS

Johnston Community College students are expected to dress appropriately at all times, and their dress should not be distracting to the educational environment. Students are required to wear shoes to help ensure safety on campus and/or college facilities. Students should be advised that certain program-specific apparel requirements exist. Explanation of these requirements will be explained during program orientation.

SECURITY AND EMERGENCIES

Johnston Community College encourages all students and employees to report emergencies and/or criminal actions. If the emergency or criminal action involves personal injury or damage, security personnel and the vice president of student services should be notified immediately. If the emergency or criminal action involves injury to property or buildings, the vice president of administrative services should be notified immediately. The vice president of student services and vice president of administrative services are responsible for responding to emergencies and criminal actions. In their absence, other college vice presidents are responsible for responding to any emergency in their areas.

The administration attempts to provide a safe, secure educational environment for all students and employees. Security guards are on duty during classes and on weekends. The security guards provided by the College have no law enforcement powers and contact the sheriff’s department as needed.

All new registering students participate in a general college success class. During the class, the need and procedure of reporting emergencies and criminal activities, campus security measures, and crime prevention will be discussed.

Information regarding drug and alcohol abuse is covered under a separate drug and alcohol policy in the “Student Development Services” section of this catalog and on the College Web site.

In accordance with the Crime Awareness and Campus Security Act of 1990, information pertaining to the number and type of criminal actions occurring on campus is collected by the vice president of student services and the vice president of administrative services and compiled annually. It is housed in the Student Services Office and is provided to students and employees through publications, including the Campus Crime Report, the College Web site, mailed correspondence, and other media. A copy of the report may be obtained from the office of the Vice President of Student Services.

INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY

General Policy

Faculty, staff and students shall be expected to be responsible for appropriate behavior with regard to use of the College’s computer network and computing resources, and given that communications on the network are often public in nature.

The computer network shall be provided for faculty and students to conduct research and for communications.

Access to the computer network shall be considered a privilege, not a right. Access entails responsibility, and access to Network Services shall be provided to employees and students who agree to act in a considerate and responsible manner.

Individual users of the College’s computer network shall be responsible for their behavior and for communications over the network. Users shall be expected to comply with the College’s standards and honor all agreements.

Computer network storage areas shall be treated as public space, and Network administrators shall be authorized to review computer files and communications to maintain system integrity and ensure that users are using the system responsibly.

Policy Provisions

Rules/Sanctions for Computer Use

The following computer uses shall not be permitted, and violations may result in a loss of access, and as applicable, the involvement of law enforcement agencies and potential prosecution:

1. Sending or displaying obscene messages or images;
2. Using obscene language;
3. Harassing, insulting or attacking others;
4. Damaging computers, computer systems or computer networks;
5. Violating copyright laws;
6. Using the passwords or identities of others;
7. Trespassing in the folders, work or files of others;
8. Intentionally wasting limited resources; and
9. Employing the network for commercial purposes.

Acceptable Use

Given that the College considers access to its computer resources a privilege, which may be limited or forfeited by abuse, misuse or violations, users shall be expected to comply with the following conditions.

1. Compliance with all federal and state laws pertaining to copyright, privacy and confidentiality and regarding transmission of illegal, harassing or obscene materials;
2. Use of the computer only for educational, instructional and administrative purposes;
3. Use of the computer in a manner that does not impede access by other authorized users by unnecessarily tying up the network resources or disrupting the use of the network;
4. Demonstration of respect for other users, both College users and users who can be reached through network connections, by adhering to proper network etiquette; and
5. Demonstration of respect for the integrity of the
computer system and all networks by operating the system properly;
6. Use of computing resources and access accounts only for the purpose assigned and not for commercial purposes or non-college related activities;
7. Responsible use of assigned accounts, including password protection and Internet resources—allowing friends, family or co-workers to use an account shall be deemed a serious use violation;
8. Use that does not damage or disrupt hardware or communication such as virus creation and propagation, wasting system resources or overloading networks;
9. Use that does not create, display, transmit or make accessible threatening, racist, sexist, obscene, pornographic, offensive, annoying or harassing language and/or materials; and
10. Use that does not broadcast unsolicited messages or unwanted email.

PEER-TO-PEER FILE SHARING POLICY

Johnston Community College maintains a campus network to support and enhance the academic and administrative needs of our students, faculty, staff and other campus users. The college is required by Federal Law—H.R. 4137, Higher Education Opportunity Act (HEOA)—to make an annual disclosure informing students that illegal distribution of copyrighted materials may lead to civil and/or criminal penalties. Also, the HEOA requires institutions to take steps to combat and disclose its policies and sanctions for copyright infringement. The college must certify to the Secretary of Education that a policy is in place. Finally, the HEOA requires the college to provide alternatives to illegal file sharing. All users are encouraged to check the list of “Alternatives to Illegal Downloading”, http://www.educause.edu/node/645/tid/33381?time=1263330285.

Although the HEOA makes reference only to students using Peer-to-Peer (P2P), this policy applies to all Johnston Community College network users. The College reserves the right to suspend or terminate network access to any campus user. Likewise, network access may be suspended if any use is impacting the operations of the network. Violations may be reported to appropriate authorities for criminal or civil prosecution.

Annual Disclosure

Johnston Community College computers and wireless access will require users to click okay to agreeing with our acceptable use policy which references copyright violations. Each semester a reminder of these policies will be sent to student, faculty and staff email accounts. This information is also referenced in the student handbook and college catalog.

Plans to “Effectively Combat” the Unauthorized Distribution of Copyrighted Material

Johnston Community College currently employs bandwidth-shaping technology to prioritize network traffic. The College limits the amount of bandwidth available to P2P applications but does not filter such applications since much of the traffic is legal.

Offering Alternatives to Illegal File Sharing

Both the Recording Industry Association of America (RIAA) and the Motion Picture Association of America (MPAA) have web sites that list legal alternatives to illegal P2P. Some of the more popular alternatives include:

Music
• iTunes
• SpiralFrog
• Pandora
• amazonMP3

Movies and Television
• iTunes
• Hulu
• Netflix Watch Instantly
• Major Television Network Web Sites

For more information on legal alternatives, please visit:
RIAA: http://www.riaa.org/toolsforparents.php?content_selector=legal_music_sites
ACADEMIC REGULATIONS

Johnston Community College exists to provide for the fullest possible development of each person who enters its open door to learn. The policies, programs of study, and regulations of the College are directed toward this objective.

The College expects each student to make significant academic progress toward his or her chosen educational goal and is committed to making this objective possible for all students. At the end of each semester, final course grades are issued and an assessment is made of the student’s academic progress. Satisfactory progress is defined in this section of the under the heading “Academic Progress.”

THE SEMESTER SYSTEM

The College operates on the semester system. Fall and spring semesters are each 16 weeks in length. Classes are in session five days per week. Summer may be a shorter session (typically a 10-week session).

Classes normally meet 50 minutes per instructional hour with a 10-minute break between classes. The number of times per week that a class meets is determined by the number of semester hours credit prescribed in the curriculum and is indicated in the semester class schedule.

Semester hours of credit are awarded as follows: one semester hour of credit for each hour per week of class lecture, one semester hour of credit for each two or three hours per week of laboratory work or clinical experience, manipulative laboratory training, or shop practice.

REGISTRATION

Students pursuing degree, diploma, and certificate programs typically register and are enrolled at the beginning of a semester. Students wishing to take fast track courses in selected programs that are scheduled to start after the beginning of a semester may register and be enrolled for those courses prior to the starting date. Generally, students begin their program of study in the fall semester. However, entrance at the beginning of other semesters is possible when the curriculum and class schedule permit.

Students may register for certain courses to be taken in evening hours on a modified basis, as provided for in curriculum outlines and course descriptions.

All students are expected to register during the time scheduled for that purpose. Semester registration dates are published in the “Academic Calendar” and announced prior to each semester.

Entering curriculum students must be accepted for admission by the director of admissions and counseling before beginning the registration process. Each student is assigned a faculty advisor who assists the student in planning a program of study. The faculty advisor must approve the student’s proposed class schedule each semester prior to registration.

Continuing Education Registration

Information regarding registration for Continuing Education courses may be found in the “Continuing Education” section of this catalog.

Distance Education Registration

Students who have an application on record at Johnston Community College should contact the Student Services Office. Students who do not have an application on record at the College will need to fill out an application for admission and will then be contacted with information on how to register.

Course Load and Classification

Each student is responsible for being familiar with the requirements of the program of study that the student is pursuing and for keeping account of progress toward completion of graduation requirements.

Class schedules and course loads should be carefully planned by the student in consultation with the faculty advisor. The student is expected to be familiar with all regulations set forth in the catalog. Copies are available in the Student Services Office.

A full-time curriculum student is one who is carrying a minimum course load of 12 semester hours in a degree, diploma, or certificate program. The normal load for typical full-time students generally varies between 15 and 21 semester hours. A part-time student is one who is carrying a course load of less than 12 hours.

A student who desires to register for course work in excess of 21 credit hours (excluding fast track courses), must present a written recommendation from the faculty advisor and secure the approval of the vice president of curriculum instruction.

Students in associate degree programs who have completed less than one-half of the credit hours required for graduation are classified as first-year students. Those who have completed one-half or more of the credit hours required for graduation are classified as second-year students.

Persons who wish to enroll for a special educational objective not specifically provided for in an established curriculum may be admitted and classified as special students. Special students are required to pay tuition and fees. Exceptions must be approved by the vice president of student services.

Credit Hour Load Policy for Visiting Students

Any student attending a community college shall not enroll in more than 21 credit hours per semester without prior approval of the home college. Any student enrolled in two or
more colleges concurrently during a semester shall give each college complete enrollment information including: the name of each college enrolled, the number of credit hours taken, the class schedule, and other relevant information.

Any student who exceeds 21 credit hours during a semester without prior approval of the home college or fails to give complete and accurate enrollment information shall be prohibited from taking courses at any community college for one academic year.

**SCHEDULE ADJUSTMENTS AND WITHDRAWALS**

Registered students may add a class within the first two school days of any term. The student must secure the faculty advisor’s approval on a drop/add form before the change can be made official in the Registrar’s Office.

Warning: All drop/add transactions must be completed in one process. If a student changes or drops a class after the semester has begun, the system refunds 75-percent of the tuition. If a student adds a class at another time (not during the same computer transaction as the drop), instead of a net zero, his or her account reflects the 75-percent refund and a 100-percent charge for the new class. The result is an additional 25-percent of the class tuition.

A. Once a student has officially enrolled in a class and paid the registration fee, the student shall maintain membership in said class, until one of the following occurs:

1. Student Withdrawal – he or she officially withdraws and the action is effective as of that date.
2. Instructor Withdrawal
   a. He or she stops attending class. Students who exceed the instructor’s attendance policy may be dropped from the class roll because of excessive absences.
   b. He or she fails to attend class prior to the 10-percent point of any term (census date). This constitutes administrative withdrawal (Never Attended) and is effective as of the first day of the class. A grade of “NA” will be assigned.

B. A student may drop a class with the following results:

1. A student may drop as late as the 75-percent date of the term without penalty as long as the instructor has not already dropped the student because of excessive absences. The transcript will indicate a “WD.” (No withdrawals are accepted for processing after the established date to drop without grade penalty for that term without extenuating circumstances and must be signed by the department chair or vice president. Withdrawals after the established date in the academic calendar are handled on a case-by-case basis.)

C. A student who is considering withdrawal from a course(s) or from the college is strongly encouraged first to consult the instructor(s) and his or her faculty advisor. A student who wishes to withdraw must complete a drop/add form, have it signed by the instructor and present it to the Registrar before an official withdrawal can be recorded. Students who fail to comply with this procedure are considered to have withdrawn unofficially, considered not in good standing with the college, and receive a grade of “WF.”

D. A student who withdraws or drops from any portion of a course (classroom, lab, clinic, or shop) will be dropped from the entire course.

E. All course changes must be in accordance with the academic calendar.

F. Students who receive financial aid or VA educational benefits should consult with personnel in those offices before dropping classes or withdrawing from the College.

**ORIENTATION**

All students in diploma and associate degree programs (except pre-biology) are required to complete an orientation course to graduate from the College. The course is designed to help incoming students learn and adjust to the academic and social environment of the College. Students are strongly advised to register for this course during their first semester at the College.

In this course, the various services provided at the College are explained. The policies and procedures of the College are also discussed. Special emphasis is placed on study skills and personal development essential for success.

Students will take ACA 111 or ACA 115 as their orientation course. Students who are required to take two or more semesters of developmental reading or English will need to enroll in ACA 115. During the admissions interview with a counselor, students will receive a Course Assignment Sheet indicating whether they are to take ACA 111 or ACA 115.

**THE ACADEMIC SKILLS CENTER**

The Academic Skills Center provides instruction, academic support, guidance, and resources to students enrolled at Johnston Community College. Particular focus is given to students who wish to improve their skills in reading, English, and math. The Center’s experienced and knowledgeable staff work closely with students to help ensure they are learning the basic skills needed to academically succeed.

The Center offers lab instruction, academic workshops, computer and video-assisted tutoring, a resource library of subject specific texts and workbooks, and other academic material. The Center is also a quiet place to study.
THE TUTORING CENTER

The Tutoring Center provides high quality academic support services to currently enrolled Johnston Community College students. The center offers workshops and supplemental instruction, and works with both individuals and groups.

THE CENTER FOR ACADEMIC PLANNING (CAP)

The Center for Academic Planning (CAP) is a place where students can meet with faculty advisors and receive information on academic programs, degree requirements and academic policies and procedures. The Center serves students in Developmental Studies, select College Transfer programs and those students coded as Special Interest.

The Center will assist students with understanding and completing the advising and early registration process including planning academic schedules, explaining academic policies and graduation readiness.

THE WRITING LAB

The Writing Lab is available to Johnston Community College students to help them improve their writing skills. Assistance is available with all aspects of the writing process. One-on-one and small group sessions are available.

CHANGES OF PROGRAM

Students are permitted to change from one program of study to another program in accordance with changes in their educational and career objectives. A student who wishes to change from one program to another is required to consult with a counselor concerning his or her proposed educational plans and to secure approval from the Admissions Office.

Changes of program should be initiated at least four weeks prior to the date of registration. Counseling is provided to assist the student in educational and career planning. Curriculum courses previously passed are evaluated for purposes of transfer credit to the student’s new program of study. Previously earned credit hours approved for transfer are granted toward completion of graduation requirements for the new program of study.

ATTENDANCE REGULATION

All students must enter class prior to the class 10 percent (census) date, which is the date set by the state for reporting purposes. Students who fail to attend by this date will be dropped from the class roll. Regular and punctual attendance is expected of all students in order for them to achieve their potential in class and to develop desirable personal traits necessary to succeed in employment.

Since course content and teaching methods vary, each instructor will determine his or her own requirements for attendance. Attendance requirements for each class will be printed in the course syllabus, which will be distributed the first week of class. Class attendance is calculated from the first scheduled class meeting to the last. Late arrivals and/or early departures may count toward total absences.

If a student is dropped by an instructor due to excessive absences, a grade of “WF” will be issued and calculated in his or her grade point average and could affect his or her financial aid. A student may be dropped by an instructor due to excessive absences at any time during the semester, including that time period before the date designated each semester as the last day a student can drop without grade penalty. The student must obtain the permission of the instructor to reenter class. If this request is denied, the student may petition the department chair for reinstatement. If the department chair denies the request, the vice president of curriculum instruction will make the final ruling on the decision.

Students who choose to participate in College related activities such as SGA or Athletics must adhere to the attendance policy. Students are responsible for informing their instructors in advance of absences and are expected to make arrangements for making up work missed. In such cases, upon approval of the instructor, class time missed will not be counted as absences provided the students are otherwise in good academic standing (2.0 cumulative GPA).

GRADING SYSTEM

Grading Policy

Johnston Community College students earn grades for classes in accordance with criteria set forth in course syllabi. The instructor of record assigns grades at the end of each semester utilizing the grading system. All grades are final and are not subject to change unless an error in calculation occurs. Any student who is concerned that the grade is erroneous should consult with the instructor within one semester after the grade is earned. Any further grade appeal should be made to the department chair and if necessary to the vice president of curriculum instruction whose decision is final.

Final course grades are issued to the student at the end of each semester in accordance with the following grading system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Unsatisfactory</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Incomplete temporarily for the duration of the following semester or summer session. Credit hours attempted are not counted in the present semester in computing the grade point average. If a passing grade is not achieved during the following semester, the grade of "I" automatically becomes "F" and credit hours attempted for the course are counted in computing the grade point average.

**WD** Officially withdrew by the 75-percent point of the semester. Credit hours attempted are not counted in computing the grade point average. No withdrawals are accepted for processing after the 75-percent point of the semester without extenuating circumstances and must be signed by the department chair or vice president. Withdrawals after the 75-percent point of the semester are handled on a case by case basis.

**WF** Withdraw failing occurs if the student exceeds the number of absences specified by the attendance requirement and is dropped by the instructor. Credit hours attempted are counted in computing the grade point average. Also, students who withdraw after the 75-percent point would get a WF without extenuating circumstances.

**CR** Credit by proficiency examination. Courses on which this grade is earned are not included in the grade point average.

**AU** Audit. Course taken for noncredit purposes. Students auditing courses must meet the attendance regulation to continue in class.

**NA** Never attended. Non-penalty grade.

**EL** Credit by Experience.

**Removal of “I” Grades**
The grade of “I,” meaning course work is temporarily incomplete, may be removed by completing all work assigned by the instructor. It is the responsibility of the student to make arrangements with the instructor to accomplish the required work needed to remove the “I” grade. If the student satisfactorily completes the required work during the semester or summer session immediately following receipt of the “I” grade, the instructor assigns a permanent passing grade. Otherwise, the “I” grade automatically becomes a grade of “F” for purposes of the student’s record and cumulative grade point average.

**Final Grades**
Final grades will be available through WebAdvisor to students at the end of each academic term. Grade reports are no longer printed and mailed to students.

**Minimum Class Size**
All curriculum classes will be expected to have a minimum number of 10 students. Exceptions to this policy may occur when it is determined by the vice president that offering a small class is in the best interest of the students or the community.

**Course Repetition and Auditing**
Students may repeat a course for credit no more than three times. A course may be repeated to improve a grade or replace a withdrawal. All grades, including the record of an audit, and credit hours attempted will appear on the student’s official transcript, and will be utilized in determining eligibility for financial aid. However, only the higher grade will be used for computing total credit hours attempted, total grade points earned, and grade point averages (GPAs). Exceptions to this policy may be made with prior approval by the vice president of curriculum instruction. This policy does not apply to developmental courses.

To audit, a student must register for the course and pay regular tuition. The last date to register to audit a course is the last day of the late registration period, as specified in the “Academic Calendar.”

Students who audit courses must abide by the College attendance regulation and are encouraged to take tests and to participate in class discussion, but are not required to do so.

A grade of “AU” is given for record purposes.

**Advanced Placement Credit**
Johnston Community College participates in the Advanced Placement (AP) program. An AP credit schedule is available on the JCC Web site. According to the Comprehensive Articulation Agreement, students who receive AP course credit at a community college but do not complete the general education core will have AP credit awarded on the basis of the receiving institution’s AP policy.

**Credit by Examination**
Course credit for proficiencies previously developed by the student may be earned by examination. A student who wishes to challenge a course may apply to take a proficiency examination covering the content of the course. Examinations may be arranged to document proficiencies previously developed through employment, military service, secondary education, post secondary non-accredited schools, or correspondence schools.

To earn credit by proficiency examination the student must:

1. Not have previously attempted the course for which credit by examination is being sought.
2. Submit the prescribed application for approval to seek credit by examination. Application forms are available from the Student Services Office.
3. Register for the course and pay appropriate tuition and fees as may be required.
4. Demonstrate to the satisfaction of the appropriate faculty
member that sufficient justification exists to warrant approval of the request for the examination.

5. Secure written approval from the instructor and the department chair to take the examination.

6. Be sure that for any course(s) which the student has registered at the beginning of the semester and has attended classes, credit by examination must be gained within the first two weeks of the semester. Courses for which a student has secured approval and has registered after the normal registration period may be challenged at any time during the semester.

7. Arrange an appropriate time at the convenience of the instructor to take the examination. The student is allowed one opportunity to take a proficiency examination for credit in any given course.

The grade of “CR” (credit by proficiency examination) is the official grade used by the instructor to report successful completion of a proficiency examination. To earn credit by examination, a student must achieve a score equivalent to not less than “C” on the examination. There is no penalty or grade of record for an unsatisfactory grade on a proficiency examination.

Courses on which the grade of “CR” is earned are not included in the calculation of the student’s grade point average.

Credit by Experience

The granting of curriculum credit for nontraditional educational experiences will be considered upon receipt of appropriate official documentation by the vice president of student services. The vice president of student services will evaluate the documentation to determine the applicability to the student’s educational program. Transfer credit for nontraditional work from an accredited institution is limited to no more than 50 percent of an associate degree, diploma, or certificate requirements. The student will receive written notification of credit awarded on the transfer credit evaluation form.

Curriculum credit for proficiencies developed through various nontraditional learning activities may also be earned as described in the credit by examination policy. Curriculum credit may be granted for courses that have been passed by appropriate examination of the Advanced Placement program (AP), the College Level Examination Program (CLEP), and the Defense Activity for Non-Traditional Education Support (DANTES). Credit will be allowed for AP scores of three and above. CLEP and DANTES test scores must meet American Council on Education (ACE) minimum recommendations.

1. The student must document a specific work experience or skill that coincides with the skills and tasks required in a particular course.

2. The department chair will evaluate the documented training and/or experiences which may require a demonstration of one’s ability. Experiences must be approved by the student’s curriculum department chair, the subject area department chair, chief academic officer, and the vice president of student services.

3. Veterans may apply credit for training received under the armed forces college training programs and some specialized and technical training completed under the auspices of the armed forces. Appropriate documentation must be provided.

4. The approved credit recommendation should be submitted to the Registrar’s Office.

5. The registrar will record a symbol of “EL” on the transcript with credit hours; however, no grade points will be assigned.

6. Documentation of experience shall be kept on file for five years in the Registrar’s Office.

North Carolina High School to Community College Articulation Agreement

Through an agreement between the North Carolina Department of Public Instruction and the North Carolina Community College System, high school graduates are eligible to receive Johnston Community College credit for certain upper level career and technical courses upon presentation and evaluation of a high school transcript.

Credit will only be given for courses that are required in a student’s program of study. The following criteria will be used to award college credit for identified high school courses:

1. Grade of B or higher in the course, and;
2. Minimum score or higher on the standardized VoCATH post-assessment as set forth in the statewide articulation agreement, and;
3. Students must enroll at the community college within two years of their high school graduation date.

Any student wishing to receive credit should submit an official high school transcript and all official standardized VoCATS post-assessment scores. A college counselor will complete a transcript evaluation during the admissions interview.

Core Competencies

Every individual needs common knowledge, skills, and attitudes to be effective as a person, a worker, a consumer, and a citizen. Johnston Community College has defined core competencies as listed below. Graduates of all associate degree and diploma programs are expected to be able to demonstrate these competencies.

Communicate

- Speak and write clearly and effectively
- Read, comprehend, and follow directions
- Listen effectively
- Organize and deliver an oral presentation
• Identify self strengths and needs for improvement as communicator

Think
• Analyze information
• Identify solutions
• Make logical decisions
• Solve problems
• Be creative

Perform
• Interpret numerical data
• Manipulate data logically
• Demonstrate basic computer skills
• Apply occupational technical skills
• Recognize the impact of technology

Value
• Appreciate diversity
• Interact effectively
• Adapt to change
• Demonstrate responsible citizenship
• Express an awareness of historical and global perspective

Military Service Training
Military service school records may be submitted for transfer credit consideration. Service school diplomas, Army/ACE Registry Transcript System (AARTS) Transcripts, and Military Occupational Specialty (MOS) Evaluation Score Reports are accepted for transfer credit evaluation. Military service experiences are evaluated using American Council on Education (ACE) recommendations.

Grade Point Average
The cumulative grade point average is computed by dividing the grade points earned by the hours attempted. For example, 38 grade points are divided by 20 semester hours attempted to equal a 1.90 cumulative grade point average.

When a course is repeated, the highest grade earned is included in the computation of the student’s cumulative grade point average.

Dean’s List
The College recognizes outstanding academic achievement each semester by publication of the Dean’s List. The Dean’s List is made up of students who are enrolled for a minimum of nine semester hours in any semester and have achieved a semester grade point average of at least 3.5 out of a possible 4.0 with no grade lower than “C.”

Forgiveness Policy
A student who has not been enrolled in curriculum courses in the College for 36 consecutive months may request the registrar to reevaluate his/her academic record. Under this policy, the student may request that his or her previous grade(s) of “F” not be used in calculating the cumulative grade point average. Prior to the reevaluation, the student must be readmitted to the College, register for courses, and complete at least 12 credit hours of course work with a minimum grade point average of 2.0. The registrar, at the request of the student, will reevaluate his or her cumulative grade point average as appropriate. A reevaluation is provided only once for each student.

ACADEMIC PROGRESS
Each student enrolled in a degree or diploma program is expected to maintain satisfactory progress toward completion of requirements for the degree or diploma. At the end of each semester, the student’s semester grade point average and cumulative grade point average will be reviewed.

To be considered making satisfactory academic progress, a student must maintain at least a 2.0 cumulative grade point average related to the number of credit hours attempted.

Cumulative grade point average will be used to determine each student’s academic progress and status at the College. This average is applicable also for purposes of certification to the Veterans Administration; Social Security Administration; State Division of Vocational Rehabilitation Services; student grants, loans, scholarships, other college financial aid; and other public and private agencies authorized to receive this information.

Records of progress are kept by the registrar on veteran and non-veteran students alike.

Additional academic progress standards are required for students who are receiving financial aid. This information may be found in the “Student Development Services” section of this catalog under the “Financial Aid” heading.

Academic Probation
A student whose academic progress is unsatisfactory, based on the student’s cumulative grade point average, may be placed on probation. Once placed on probation, the student should meet with their academic advisor prior to registration. The advisor will determine an appropriate course load which may restrict the number of credit hours attempted. A student will be removed from probation when the student’s cumulative grade point average meets the minimum requirements of 2.0.

Academic Suspension
A student, who has been on academic probation for two consecutive semesters, may be suspended from the college for a period of one semester. Prior to returning to their respective program, the student will be required to meet with a counselor in order to review their educational objectives. The student will also meet with their academic advisor prior to registration to determine an appropriate course load.

A student suspended more than once for insufficient academic progress may be suspended for two semesters and additional
Students who are unable to maintain satisfactory academic performance in compliance with College and departmental policies may be subject to academic dismissal.

The vice president of student services is responsible for administration of academic probation and suspension.

Students who wish to appeal their suspension status must notify the vice president of student services in writing 10 working days before the first day of classes of the semester in which they wish to enroll. The student should explain his/her reasons for the appeal and why the suspension should be rescinded.

**ACADEMIC DISMISSAL – BLET/HEALTH PROGRAMS**

A student whose academic progress does not meet established program requirements may be academically dismissed from the program. The following program requirements are also published in the departmental handbooks and students are made aware of these policies prior to enrollment.

**Basic Law Enforcement Training Program**

Students must achieve a minimum score of 70 percent of each end-of-block test. All students must satisfactorily complete the physical conditioning requirements.

**Health Programs**

Students in the Associate and Diploma Degree Nursing, Cardiac and Vascular Sonography, Computed Tomography and Magnetic Resonance Imaging Technology, Interventional Cardiac and Vascular Technology, Medical Assisting, Medical Sonography, Nuclear Medicine Technology, Pharmacy Technology, Phlebotomy, Radiography, and Therapeutic Massage programs are required to attain a minimum grade of “C” on all major courses and the biology courses. In addition, each student must demonstrate satisfactory clinical skills.

**CATALOG OF RECORD**

The catalog that is current when the student enrolls in the College is the catalog of record. A student who is in continuous attendance, except for summer term, may graduate under provisions of his or her catalog of record, or a subsequent issue. A student who is not enrolled for a period of two consecutive semesters must graduate under the provisions of the catalog in effect on his or her last reentry date or a subsequent issue.

A student who changes his or her program of study will come under the provisions of the catalog in effect at the time of the change or a subsequent issue.

**DEGREES, DIPLOMAS, AND CERTIFICATES**

The Associate in Applied Science degree is awarded to students who complete a two-year technical education program.

The Associate in Arts, Associate in Arts – Pre-Business Administration, Associate in Fine Arts – Art, Associate in Fine Arts – Music, Associate in General Education, Associate in Science, Associate in Science – Biology & Biology Education, or Associate in Science – Pre-Engineering as appropriate, is granted to students who complete the two-year college transfer program.

The College awards certificates for completion of other courses of study.

**Award of Additional Associate Degrees or Diplomas**

The College may award an additional degree or diploma to the student who has completed all required and elective courses specified for each additional program of study. A student shall be given credit for having completed courses in a degree or diploma program if they are the same courses previously taken and satisfactorily completed in another degree or diploma program.

It shall be the joint responsibility of the vice president and department chair to determine elective courses acceptable for transfer credit.

**Changes in Curricula**

During a period of transition following curriculum revision, students currently enrolled may select either the old or new curriculum as their basis for meeting graduation requirements. Course substitutions are subject to approval of the department head and the vice president.

Students who have not attended for two or more consecutive semesters and apply for readmission to a curriculum following curriculum revision must meet the new requirements for graduation, as outlined in the current or amended catalog.

**GRADUATION REQUIREMENTS**

To be eligible for graduation from an associate degree or diploma program, the student must meet the following requirements:

- Have passed all courses specified and required in the student’s chosen program of study.
- Have earned a minimum cumulative grade point average of 2.0 on all required courses attempted at the College.
- Have taken and passed at least one fourth of the courses required in the program at Johnston Community College. It is anticipated that the final 15 semester credit hours be completed at the College.
- Have paid all financial obligations owed to the College.
- Have filed with the registrar’s office an application to graduate within the first 10 days of the student’s final semester.
To be eligible for graduation from a certificate program, the student must:

- Pass all courses required in the program of study.
- Have paid all financial obligations owed to the College.
- Have filed with the registrar, an application to graduate within the first 10 days of the student’s final semester.

AWARDS

**Outstanding Student Awards**

Outstanding student awards are presented annually at graduation to a graduating student from each program of study who has maintained a 3.25 grade point average and has made the most significant contribution in terms of service to the community and to the College.

**Academic Excellence Awards**

Academic Excellence awards recipients are nominated by faculty or staff and selected on the basis of selected academic criteria. The two recipients are recognized at the North Carolina Community College System Academic Excellence Awards Luncheon for their academic achievements.

**President’s Award**

The President’s Award is given to the student selected as most outstanding in scholastic achievement and leadership qualities.

The Student Advisory Committee makes the selection from Outstanding Student Awards nominees. A plaque is presented to the recipient of the award at graduation and his or her name is added to a permanent plaque on display at the College.

**Citizenship Award**

The recipient of the Citizenship Award is a graduating student selected on the basis of school leadership, service to fellow students, and participation in extracurricular activities. Nominees are submitted by faculty and staff members. The Student Advisory Committee makes the selection. The recipient is presented a plaque at graduation and his or her name is added to a permanent plaque on display at the College.

**Distinguished Service Award**

The Distinguished Service Award is presented to a student who has shown outstanding leadership in both school and community activities beyond the scope of the other awards. The selection is made by a majority vote of the Administrative Council and may not be awarded every year.

**Student Government Service Award**

The Student Government Service Award is given each year by the Student Government Association to the student who has rendered the most outstanding service to his or her fellow students.
THE LIBRARY

The primary purpose of the Library at Johnston Community College is to provide materials and services to advance the educational goals and objectives of the College. The Library provides resources for an expansive variety of subject areas, including resources to serve the avocational and general interests and needs of the students, faculty, staff, and other interested citizens of Johnston County and surrounding areas.

Resources

The collection includes a “storehouse” of many types of media—both print and non-print—selected to support and enrich the curriculum areas offered by the College. The collection, which continues to expand, is designed to serve students, faculty, and staff as well as the community at large. The Library’s catalog is available online via the College’s Web site. JCC is a member of CCLINC—an online catalog containing the combined holdings of almost 50 North Carolina community colleges.

Audio visual and digital equipment for use with non-print media is circulated through the Library. Please ask at the circulation desk for specifics of usage.

Patrons may utilize the research computers in the Library after signing an “Acceptable Use” agreement and signing in at the circulation desk. Students and community users can access the Internet on the library computers. While computers do have Microsoft Office, their primary purpose is designed for the access and use of online research tools. The Library subscribes to:

- Opposing Viewpoints Resource Center which provides access to information on social issues.
- Literature Resource Center which provides reference information on authors and their works and includes biographies, bibliographies, full-text criticisms of author’s works and literary careers.
- Science Resource Center covers topic overviews, experiments, biographies, pictures illustrations.
- Biography Resource Center offers biographical information. Includes full-text articles from periodicals.
- Stat!Ref provides full-text information for healthcare students and professionals.
- History Study Center which acts as a gateway to historical study, acquainting students with the form and content of primary sources while supporting their study with key articles from historical journals and a library of respected historical reference resources.
- SIRS Issues Researcher and SIRS Webselect are two online databases of carefully selected, reliable and credible internet resources on vital issues and topics.

- NCLIVE which is a resource provided by the State of North Carolina and currently offers online access to full text articles from several thousand newspapers, journals, magazines, encyclopedias, and reference books. Included in NC Live are the following databases:
  - Alexander Street Press
  - Britannica
  - Chadwyck-Healey
  - CQ Press
  - EBSCO NoveList
  - EBSCOhost
  - Gale
  - Greenwood
  - HeritageQuest
  - infoUSA
  - LearningExpress
  - Morningstar
  - NetLibrary
  - NewsBank
  - OCLC FirstSearch
  - PBS Video Collection
  - ProQuest Company
  - RLG
  - Sanborn Maps North Carolina

NCLIVE is also available to North Carolina remote users via NC LIVE@HOME. Currently enrolled students at Johnston Community College, on-campus or distance learning students or employees of the College may receive access to the databases. An ID and password are required.

Library Services

The operating schedule of the Library is arranged to provide both day and evening students ample time and opportunity for extended periods of study. In order to maintain an atmosphere conducive to study and research, cell phones must be put on vibrate and food is not allowed in the Library.

Library financial obligations must be paid in cash and cleared before students will be allowed to register for classes, graduate, or receive transcripts.

The student identification card serves as the college Library card and no material will be issued without one. Information on how to obtain an ID card is available in the “Student Activities and Life” section of this Catalog under the “Student Identification Card” heading.

In order to extend the outreach of the JCC Library, a Library helpline is available for all JCC students, faculty, staff and community patrons. The Library Helpline is a service designed to answer quick reference questions. The Library invites its patrons to e-mail questions to libraryhelp@johnstoncc.edu and a professional librarian will respond with the appropriate answer during normal business hours.

CCLINC is a shared catalog with more than a million learning
resources, making this library cooperative third in size among
the libraries of publicly funded institutions of higher education
in North Carolina.

DISTANCE EDUCATION

The Instructional Technology and Distance Education Center
expands learning opportunities by promoting the use of non-
traditional delivery methods. Johnston Community College
offers a variety of quality courses through various nontra-
ditional delivery methods to meet the needs of a growing
diverse population of learners. Each distance education course
is equivalent to the on-campus sections of the same course
in terms of objectives, contact, rigor, and transferability.
Students may choose to take telecourses, Internet-based,
hybrid, web-enhanced, or interactive television (ITV) courses.
Although the nontraditional methods of instruction offer a high
degree of flexibility, they do require self-motivated and self-
disciplined students.

Telecourses

When students enroll for a telecourse, videos are checked
out from Johnston Community College Library. Faculty
interacts with students through a combination of on-campus
orientations, written assignments, electronic mail, postal
service, or Blackboard.

Internet-based Courses

The College offers a variety of courses that are computer-
based and use the Internet as the main method of delivery.
Students enrolled in Internet-based courses communicate
with their instructor(s) and other students by e-mail,
provided by JCC and through JCC’s course management
system, Blackboard.

Instructors use a variety of resources including textbooks,
study guides, internet sites, and personally designed materials
that supplement their instruction.

Students who wish to take an Internet-based/online course at
Johnston Community College should have access to reliable
computer with internet.

Before enrolling in an Internet-based or online course, the
student should be very comfortable demonstrating the following
competencies:

• Computer operation and start-up.
• Setup, maintenance, and troubleshooting through
technical assistance resources from your Internet
Service Provider.
• Understand and have knowledge of basic word
processing.
• Basic Internet skills.
• Knowledge of using e-mail.

Suggested Computer/Software Requirements
• USB port (minimum of 2)
• Intel Core Duo equivalent or better
• 2GB or greater (for XP)-3GB or greater (for Vista)
• 4 MB video memory
• 2GB or greater available on hard drive
• CD-RW drive or CD-RW/DVD combo
• Cable modem or Broadband internet connections
• Dial-up internet connection is NOT recommended for
internet classes

PC Software
• Operating System: Microsoft Windows XP or Vista
• Web Browser: Internet Explorer 7.0 or above
• Productivity: Microsoft Office 2007 (Word, Excel,
PowerPoint, Access, and Outlook)
• Documentation: Adobe Reader
• AntiVirus: Symantec Norton Antivirus

Hybrid

Hybrid courses combine a variety of different teaching meth-
ods. At JCC, hybrid courses require on-campus attendance
for part of the instruction, and the other part of the instruction
could occur either online using a course management system,
telecourses, or other media delivery methods. Attendance is
required on the days and times listed in the class syllabus.

Web-Enhanced

In a web-enhanced course, the primary delivery method is
face-to-face, however, students will be required to use the
Internet as a supplemental part of the course.

Interactive Television (ITV)

Interactive Television courses use an interactive, two-way
video network that connects universities, colleges, second-
ary schools, medical centers, and other agencies throughout
the state. Johnston Community College participates in ITV
courses with 2 state-of-the-art video classroom. A course in
these rooms is either broadcast to another college or received
from another college via video. This allows JCC to send and
receive high-quality courses with partners throughout the
state, enhancing the educational experience of our students.

Blackboard

Blackboard is the current online learning management sys-
tem used for online instructors to build and manage virtual
classrooms. Instructors and students can access Blackboard
sites anytime; anywhere from Internet Explorer, and a 24/7
support center is available to assist with problems that may be
encountered during off hours, weekends and holidays.

JCC E-Mail

Registered students, faculty, and staff are provided with JCC
e-mail. This e-mail address is loaded into Blackboard and can
be accessed through a link on the JCC Web site (www.john-
stoncc.edu), a link in Blackboard (http://bb.johnstoncc.edu) or by directly entering http://mail.google.com/a/mail.johnstoncc.edu into an updated Internet Explorer browser.

Accessing Blackboard, JCC-Email and WebAdvisor

From WebAdvisor, located on JCC’s main website (http://www.johnstoncc.edu), ‘Account Information’ will direct you how to verify your User ID and create your password to access Blackboard, JCC-Email and to gain access to WebAdvisor student information.

Network Connection

• Broadband (DSL or cable modem) connection is strongly recommended for wired connection. Large size files may take considerable time to download through dial-up. Therefore, dial-up is NOT recommended for internet courses. If you have America Online (AOL), minimize the AOL browser. Use Internet Explorer to access Blackboard.

Distance Education Through Continuing Education

The Continuing Education Division at Johnston Community College offers a distance education program designed to improve employment opportunities and job related skills from either home or office. A complete listing of Continuing Education internet courses is available under Continuing Education on the main JCC website.

Some of these courses require a minimum number of scheduled on-campus visits for orientations, testing, presentations, etc. Students enrolled in distance education courses use a variety of techniques to communicate with their instructors and/or their cybermates.

Distance education courses are facilitated by qualified, competent instructors who structure the course so that the learning outcomes are comparable to those in a traditional classroom setting. They also serve as a resource to the students.

Costs, credits, and registration procedures are the same as on-campus courses. Students have access to the same services and library resources.

NETWORK SERVICES

The Network Services Department provides the foundation, technical support, and management for many learning technologies offered at Johnston Community College. Some of these learning technologies include public wireless Internet access in a variety of locations throughout the College, a student-use open computer lab, wireless projection systems, technology enhanced whiteboards, and a web-based interactive media system that allows faculty to record their class (audio and video) so that students can view the class at a later time. These learning technologies are intended to provide greater flexibility and convenience for faculty and students, as well as increased technology access for the students of JCC. Media production is managed through the Media Services Department located in a mobile unit behind the Wilson Building.
At Johnston Community College, students apply and are admitted to programs of study. The curriculum for each program of study is designed in accordance with the Curriculum Standards mandated by the N.C. Community College System. State approval of each curriculum is required prior to the offering of courses within a program.

On each Curriculum Standard, there are requirements for general education, major hours, and other required hours. The terms “major” and “area of concentration” are defined by the College as follows:

- A major includes those courses which provide specific job knowledge or skill and comprise the majority of the hours in each program of study.
- An area of concentration is a group of courses required beyond the core for a specific related employment field.

### COLLEGE TRANSFER PROGRAMS

**Associate in Arts**

- Associate in Arts – Pre-Business Administration
- Associate in Fine Arts – Art
- Associate in Fine Arts – Music
- Associate in Science
- Associate in Science – Biology and Biology Education
- Associate in Science – Pre-Engineering

Provides the student with the opportunity to complete up to 65 semester hours of course work that will transfer as baccalaureate credit to any college in the University of North Carolina (UNC) system.

### GENERAL EDUCATION PROGRAM

**Associate in General Education**

To broaden students’ education, with emphasis on personal growth, intellectual enrichment, and improvement in general knowledge. The curriculum provides an introduction to the liberal arts (general education) in a program that can be tailored to the student’s personal interests rather than to specific technical or professional requirements. All students requiring two or more semesters of pre-curriculum English and/or reading and all students preparing to enter health science programs are placed in this program.

### OCCUPATIONAL/TECHNICAL/CAREER PROGRAMS

**Accounting**

Provides students with the knowledge and skills necessary for employment and growth in the accounting profession.

**Advertising and Graphic Design**

Provides students with knowledge and skills necessary for employment in the graphic design profession, which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

**Air Conditioning, Heating, and Refrigeration Technology**

Provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

**Associate Degree Nursing**

Provides the knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

**Basic Law Enforcement Training**

Designed to give student essential skills required for entry-level employment as law enforcement officers.

**Bioprocess Technology**

Prepares individuals to work as process operators in biological products manufacturing facilities.

**Business Administration**

Introduces students to the various aspects of the free-enterprise system.

**Cardiac and Vascular Sonography**

Provides the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures.

**Community Spanish Interpreter**

Prepares individuals to work as entry-level bilingual professionals who will provide communication access in interview and interactive settings.

**Computed Tomography and Magnetic Resonance Imaging Technology (in partnership with Edgecombe Community College)**

Prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes.

**Computer Programming**

Prepares individuals for employment as computer programmers and related positions.

**Cosmetology**

Provides training and practice in the skills required of the professional cosmetologist.

**Criminal Justice Technology**

Provides academics/knowledge of criminal justice systems and operations.

**Criminal Justice Technology - Latent Evidence**

Focuses on local, state, and federal law enforcement, evidence processing and procedures.

**Early Childhood Education**

Prepares individuals to work with children from birth through age eight in diverse learning environments.
General Occupational Technology
Prepares 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.

Greenhouse and Grounds Maintenance
Provides individuals from special populations with experience in general horticultural principles and applications.

Heavy Equipment and Transport Technology
Prepares individuals with the knowledge and skills needed to service, troubleshoot, and repair heavy duty vehicles.

Horticulture Technology
Prepares individuals for various careers in horticulture.

Industrial Systems Technology
Curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair and install equipment.

Interventional Cardiac and Vascular Technology
Provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures.

Machining Technology
Provides training in the use of equipment, materials, and software of the machine technology trade.

Medical Assisting
Prepares the individual to be a multi-skilled health care professional qualified to perform administrative, clinical, and laboratory procedures.

Medical Office Administration
Prepares individuals for entry-level positions in medical and allied health facilities.

Medical Sonography
Prepares the graduate to be a registered diagnostic medical sonographer, a skilled health care professional who uses high frequency sound waves to image internal body structures for medical diagnosis.

Networking Technology
Prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

North Carolina Truck Driver Training School
Students learn skills and safety on the highway and light preventative maintenance. Upon completion, the student will be eligible to test for a Class A CDL License.

Nuclear Medicine Technology
Provides the clinical and didactic experience necessary to prepare students to qualify as entry-level nuclear medicine technologists.

Office Administration
Prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic and computerized workplace.

Paralegal Technology
Prepares individuals to perform routine legal tasks and to assist with substantive legal work under the supervision of an attorney.

Pharmacy Technology
Prepares individuals to assist the pharmacist in duties that a technician can legally perform and to function within the boundaries prescribed by the pharmacist and the employment agency.

Radiography
Prepares the graduate to become a registered radiographer, a skilled health care professional who uses radiation to produce images of the human body.

School-Age Education
Prepares individuals to work with children from elementary through middle grades in diverse learning environments.

Therapeutic Massage
Prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction, and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

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

SPECIAL PROGRAMS

Wachovia Partnership East
East Carolina University College of Education with the support of Wachovia Bank has established consortium partnerships with community colleges and public schools within the university’s service region. The Wachovia Partnership East South Central Consortium is making it possible for students throughout eastern North Carolina to obtain a four-year degree from East Carolina University without traveling to the main campus.

Students graduate with a four-year degree from ECU by completing the first two years of the program at any one of the partnering community colleges: James Sprunt Community College, Johnston Community College, Lenoir Community College, Sampson Community College, and Wayne Community College; followed by taking ECU courses online or through face-to-face instruction at the consortium hub site, Wayne Community College. JCC contacts and advisors are Tammy Barbour and Ellen Boyd. For more information, please contact Debbie Grady, Coordinator of the Wachovia Partnership East South Central Consortium at (919) 735-5152, ext. 385 or by e-mail at gradyde@waynecc.edu.

North Carolina Department of Correction
Applied Industrial Technology certificate programs are conducted at units of the North Carolina Department of Correction. Inmate students are assigned training programs at various
times throughout the year. Assignments are made through Department of Correction personnel. Programs are offered at two correctional institutions.

**Johnston Correctional Institute**, Selma, N. C.
- Air Conditioning, Heating and Refrigeration Technology
- Electrical/Electronics Technology
- Electronic Engineering Technology
- Food Service Technology
- Horticulture Technology
- Office Systems Technology
- Masonry
- Plumbing

**N.C. Correctional Institute for Women**, Raleigh, N.C.
- Cosmetology
- Manicuring

**Johnston County Mental Health**

A special certificate program, Greenhouse and Grounds Maintenance, is offered in conjunction with the Johnston County Mental Health Department. This program is designed to provide therapeutic training for students with emotional/mental handicaps. Students are referred to the program through the Johnston County Mental Health Department.

**INNOVATIVE COOPERATIVE HIGH SCHOOL PARTNERSHIP**

Johnston Community College and Johnston County Schools collaborate to provide flexible, student-centered learning opportunities for high school students in Johnston County. This partnership maximizes the use of resources and opportunities through a variety of innovative approaches. Johnston Community College and Johnston County Schools meet annually to review partnership roles, responsibilities, and opportunities for expanding their partnership.

**Johnston County Middle College High School**

Johnston County Middle College High School opened in 2005 as a partnership high school between Johnston Community College and Johnston County Schools. This partnership high school affords students grades 10-12 the opportunity to complete their high school graduation requirements while simultaneously building a college transcript. Students wishing to attend this nontraditional high school must complete an application for admission. The maximum number of students allowed is 125. The contact number for Johnston County Middle College is 464-2303.

**Johnston County Early College Academy High School**

Johnston County Early College Academy High School opened in the Fall of 2008 as a second partnership high school between Johnston Community College and Johnston County Schools. This five year high school focuses on accelerated opportunities for beginning ninth grade students wishing to complete their high school diploma and a college transfer degree over the course of five years. Each year fifty students are selected to begin this educational journey. The contact number for Johnston County Early College Academy High School is 464-2314.

**Huskins Program**

“The purpose of the Huskins Bill cooperative programs is to make available for the enrichment of high school students, college level academic, technical and advanced vocational courses not otherwise available to them.” G.S. 115D-20(4) College-level courses are taught by community college instructors for high school students. These courses are generally located on the high school campus. High school students taking courses through the Huskins Program must demonstrate social maturity and a level of academic achievement to ensure success in college courses. The contact for the Huskins Program Director is 209-2164.

**Learn & Earn Online**

Through a special initiative high school students can earn college credits by taking online college courses at no cost to them or their families. Students earn both high school and college credit for completed courses. Access to these courses is provided during the regular school day and an online facilitator will assist students in the classroom. Students must have a high level of academic self discipline and have computer competence to ensure academic success in an online environment. The contact for the Learn & Earn coordinator is 209-2164.
College Transfer programs of study offer courses in the arts and sciences leading to an Associate in Arts (AA) degree, Associate in Fine Arts (AFA) degree or Associate in Science (AS) degree. The Associate in Arts degree, Associate in Fine Arts degree and Associate in Science degree are granted for planned programs of study and pre-baccalaureate majors consisting of 64 - 65 semester credit hours of college transfer courses.

The university parallel freshman-level and sophomore-level courses introduce students to areas of study that develop breadth of outlook and contribute to balanced development and focus on the particular major as a junior and senior student. This study is complementary to, but different in emphasis from, the specialized education and training one receives for a career.

These courses parallel the courses and requirements during the first two years of study at four-year colleges and universities and thus are considered as university parallel study.

The College Transfer program is offered through the Comprehensive Articulation Agreement between the North Carolina Community College System and The University of North Carolina system. Students who complete the general education core and pre-major emphasis and thus graduate with a grade of “C” or better in each course will meet the requirements for admission with junior class standing to senior institutions of The University of North Carolina system.

Graduates also will be eligible to be considered for admission with junior class standing to public institutions outside the state of North Carolina and to many independent institutions, including those to which specific articulation agreements have been made by Johnston Community College.

The purpose of the College Transfer program is to:

- provide quality education experiences to students seeking a baccalaureate;
- prepare students to transfer and continue successful study at four-year colleges and universities; and
- educate students in general education competencies.

The College Transfer program degree options offered with JCC’s Arts and Science Department are in full compliance with the 1997 Comprehensive Articulation Agreement between the North Carolina Community College System and The University of North Carolina system. The Comprehensive Articulation Agreement established college transfer courses, degrees, and policies that are accepted by all members of the North Carolina Community College System and all members of The University of North Carolina system.

Students not completing one of the three associate degree options will be able to transfer credit on a course-by-course basis and must comply with the requirements of the receiving institution. In all cases, it is the responsibility of students to be aware of special requirements of a specific institution or program.

Articulation agreements with private colleges and universities facilitate the transfer of College Transfer degrees, Pre-Majors and individual courses. Many private colleges and universities aggressively recruit students completing a college transfer degree option.

**PRE-MAJORS**

The Pre-Major Articulation Agreements have been approved by the State Board of Community Colleges and the Board of Governors of the University System. Students who follow the prescribed courses of study and who meet the requirements for admission to the four-year college/university are eligible to apply for admission to the major with junior class standing. Additional information regarding course requirements for these Pre-Majors guides can be found through Student Services or the applicable department.

Johnston Community College offers three transfer associate degree programs designed to allow seamless transition to four-year institutions: Associate in Arts (AA), Associate in Fine Arts (AFA) and Associate in Science (AS).

**TRANSFER TO BACCALAUREATE INSTITUTIONS**

Colleges and universities vary widely in transfer requirements for entrance into, and completion of, study in a major field. Students are advised to:

- carefully study the catalogs of four-year baccalaureate-level institutions to which they are considering transfer; and
- consult an admissions representative as early as possible prior to transfer application in order to determine transferability of courses already taken and those they plan to take.

Students interested in transferring to a four-year institution in North Carolina should refer to the Web site of the college/university for transfer information then contact their Academic Advisor.

**TRANSFER OF COURSES ON A COURSE-BY-COURSE BASIS**

Upon admission to another public two-year institution or to a public university, a community college student who was enrolled in a community college course and who satisfactorily completed the course with a grade of “C-” or better in the courses that are designated for college transfer will receive credit for those courses. The receiving institution will determine whether the course will count as general education, major, or elective credit.
FREQUENTLY ASKED QUESTIONS

What is the difference between an Associate in Arts and an Associate in Science degree?
The required and elective general education courses are the same for the Associate in Arts and Associate in Science degrees. The unique feature of the Associate in Science degree is that the 15 hours of free electives must be mathematics and science courses. The 15 hours of free electives in the Associate in Arts degree are not restricted as to subject area. Any college transfer course not taken to satisfy the general education requirement can be used as a free elective.

What about the Associate in Fine Arts degree?
This degree is intended for those students who desire to pursue a baccalaureate in a field of the fine arts, versus a more general area or disciplines of the arts or the sciences.

Should I enroll in the Associate in Arts degree program or the Associate in Science degree program?
That depends on your academic strengths, interests, and expected major after transferring from Johnston Community College. If you excel in mathematics and science and plan to major in an area that is mathematics and science oriented, you should elect the Associate in Science degree. If your planned major is not mathematics and science oriented, and you excel in social sciences, humanities, or other disciplines, you should elect the Associate in Arts or Associate in Fine Arts degree.

What are the advantages in earning the Associate in Arts or Associate in Fine Arts or Associate in Science degree rather than transferring prior to earning an associate degree?
If you earn an Associate in Arts, Associate in Fine Arts, or Associate in Science degree at Johnston Community College prior to transferring to a four-year college or university in the University of North Carolina system, you will enter as a junior. If you do not complete an Associate in Arts, Fine Arts, or Science degree prior to transferring, your course work will be evaluated on a course-by-course basis. Thus accomplishment of the associate degree is a key factor as that enables a student’s entire program of study to transfer.

How long will it take to complete an Associate in Arts, Fine Arts, or Science degree?
Enrolled as a full-time student taking the recommended course load each semester, an Associate in Arts or Associate in Science degree can be completed in four semesters of full-time study.

Can I complete an Associate in Arts, Fine Arts or Science degree program at night?
Yes. An Associate in Arts, Associate in Fine Arts, or Associate in Science degree can be completed on a part-time basis at night or in day classes, as preferred. To complete any of the three associate degrees part time at night will require a minimum of six semesters.

Am I allowed to take courses that are not in my degree program?
Yes. Courses that are not in your degree program—Pre-Major—will not count toward your degree. However, courses not in your degree program may be taken for personal enrichment or for skill development. These courses will not be covered by financial aid if they are not part of one’s program of study.

PROGRAM LISTING
Below is a listing of the College Transfer programs that are presented in the pages of this chapter.

• Associate in Arts
• Associate in Arts – Pre-Business Administration
• Associate in Fine Arts – Art
• Associate in Fine Arts – Music
• Associate in Science
• Associate in Science – Biology and Biology Education
• Associate in Science – Pre-Engineering
The Associate in Arts degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of college transfer courses.

Courses are approved for transfer through the Comprehensive Articulation Agreement. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving institutions.

### Degree A10100

**Day**

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<tr>
<th>Fall Semester 1</th>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tr>
<td>ENG 111 Expository Writing</td>
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<tr>
<td>ACA 122 College Transfer Success (1)</td>
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<td>HEA 110 Personal Health/Wellness</td>
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<tr>
<td>MAT 161 College Algebra</td>
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<tr>
<td>History Elective (2)</td>
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<td>Science Elective (3)</td>
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Total 17

Note: Prerequisites must be satisfied before taking ENG 111 and MAT 161.

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<td>ENG 112, 113 OR 114 Literature</td>
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<tr>
<td>Social/Behavioral Science Elective (8)</td>
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<td>2 Humanities Elective (9), (5)</td>
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Total 15

1 Select one HIS 111, HIS 112, HIS 131, HIS 132
2 Select two of the following: BIO 110, BIO 112, BIO 120, BIO 140 & BIO 140A, CHM 151, CHM 152, GEL 111, PHY 151, PHY 152, BIO 110, CHM 131 & CHM 131A, PHY 110.
3 Select one: ART 111, MUS 110, MUS 113, MUS 210, MUS 211, ART 114, or ART 115
4 Select one of the following: ENG 131, ENG 233, ENG 243.
5 Select one: MAT 162 (if MAT 161 has been completed) MAT 151, MAT 165, CIS 110, CIS 115, MAT 263.
6 Select college transfer math or science courses not previously taken.
7 Select 3 courses from different subject areas: ECO 251, GEO 111 or GEO 130, POL 110 or POL 120, PSY 150, SOC 210.
8 Select one: COM 231, PHI 210, PHI 230, PHI 240, REL 110, REL 211, REL 212, REL 221, SPA 111, PHI 215, SPA 112, SPA 211, SPA 212.
9 Must be a college transfer course not required or previously taken.

### ASSOCIATE IN ARTS – PRE-BUSINESS ADMINISTRATION

The Associate in Arts – Pre-Business Administration degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of college transfer courses.

This program is designed for students who intend to major in Business Administration upon transferring to a senior college or university. Courses are approved for transfer through the Comprehensive Articulation Agreement.

Students who successfully complete this course of study and meet the requirements for admission to the university may be eligible to apply for admission as juniors.

Students must meet the receiving university’s foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

### Degree A1010B

**Day • Full-Time/Part-Time**

<table>
<thead>
<tr>
<th>Fall Semester 1</th>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACA 122 College Transfer Success (1)</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Math Elective (2)</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>ACC 120 Principles of Financial Accounting</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<tr>
<td>CIS 110 Intro to Computers</td>
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<tr>
<td>History Elective (3)</td>
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Total 17

Note: Prerequisites must be satisfied prior to taking ENG 111 and MAT 161 or higher.
Spring Semester 1  
<table>
<thead>
<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG 113 Literature-Based Research</td>
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<td>Math Elective (4)</td>
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<tr>
<td>ACC121 Principles of Managerial Accounting</td>
<td>3</td>
<td>2</td>
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<tr>
<td>PSY 150 General Psychology</td>
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Total: 16

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<th>Lab</th>
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<tr>
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<td>ECO 251 Microeconomics</td>
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<td>Science Elective (7)</td>
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Spring Semester 2  
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<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tr>
<td>ECO 252 Macroeconomics</td>
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<tr>
<td>Fine Arts Elective (13)</td>
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Total: 16

(1) Students taking two or more semesters of developmental English or reading must take ACA 115 in lieu of ACA 122.

(2) Select one of the following: MAT 161, MAT 171, MAT 175. Prerequisites must be met.

(3) Select one sequence: HIS 111, HIS 112 or HIS 131, HIS 132.

(4) Select one: MAT 263, MAT 271. Prerequisites must be met.

(5) Complete the history sequence selected in #3.

(6) Select one: ENG 131, ENG 233, ENG 243.

(7) Select two: BIO 110, CHM 131/131A, BIO 111, BIO 112, CHM 151, CHM 152.

Credit will not be given for the following combinations:
- BIO 110 and BIO 111; CHM 131/131A and CHM 151.

(8) Select one: PHI 210, PHI 215, REL 110, REL 211, REL 212, SPA 111.

(9) Select one: BUS 228, MAT 151.

(10) Complete the science group selected in #7

(11) Select one: POL 120, SOC 210.

(12) Select one from #8 not previously taken.

(13) Select one: ART 111, MUS 110, MUS 113

ASSOCIATE IN FINE ARTS

The Associate in Fine Arts curriculum provides the basic course work in humanities/fine arts, English, mathematics, and social sciences with additional concentration in fine arts.

Graduates should have a sound basic knowledge of the fine arts in the area of study selected: art or music. Upon successful completion of a college transfer degree option, students are prepared to continue their education as juniors in their field of study.

The Associate in Fine Arts program is part of the Comprehensive Articulation Agreement which allows graduates of this program to transfer to one of the constituent institutions of the University of North Carolina system. Art and music classes may be accepted upon approval of the student’s portfolios, and music placement tests, and auditions. Graduates completing the Associate of Fine Arts degree will have demonstrated the ability to achieve academic and other learning goals in their study area enhancing employment opportunities.

Art Degree A1020A
Day/Evening • Full-Time/Part-Time

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<tr>
<th>Class</th>
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<th>Credit</th>
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<tr>
<td>ENG 111 Expository Writing</td>
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<td>0</td>
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<tr>
<td>ACA 122 College Transfer Success</td>
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<td>0</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective (6)</td>
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<td>0</td>
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<tr>
<td>ART 121 Design I</td>
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<td>ART 114 Art History Survey I</td>
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<tr>
<td>ART 131 Drawing I</td>
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Spring Semester 1  
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<thead>
<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG 113 Literature Based Research</td>
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<tr>
<td>Math Elective (3)</td>
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<td>ART 122 Design II</td>
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<td>ART Elective (ART 132) (7)</td>
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Total: 15

Fall Semester 2  
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<tr>
<th>Class</th>
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<tbody>
<tr>
<td>Humanities/Fine Art Elective (Lit.) (2)</td>
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<td>Social/Behavioral Science Elective (6)</td>
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Total: 18

Spring Semester 2  
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<tr>
<td>Natural Science Elective (4)</td>
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<tr>
<td>(History) Elective (5)</td>
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<tr>
<td>ART 115 Art History Survey II</td>
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<tr>
<td>ART Elective (7)</td>
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</table>

Total: 16

(1) Select one of the following: DRA 111, MUS 110, PHI 210, REL 110, REL 211, REL 212, SPA 111.

(2) Select one of the following: ENG 231, ENG 233, ENG 243.

(3) Select one of the following: MAT 161, MAT 140, MAT 151.

(4) Select one of the following: BIO 111, CHM 131, CHM 131A, BIO 110.
(5) Select one of the following: HIS 111, HIS 112, HIS 131, HIS 132.
(6) Select one of the following: PSY 150, SOC 210, SOC 220, POL 120, POL 110, GEO 251, GEO 130.
(7) Select one of the following: ART 116, ART 117, ART 132, ART 140, ART 135, ART 171, ART 212, ART 214, ART 222, ART 223, ART 231, ART 232, ART 235, ART 240, ART 241, ART 242, ART 260, ART 261, ART 262, ART 264, ART 265, ART 266, ART 267, ART 275, ART 271, ART 281, ART 282, ART 283, ART 284, ART 288, ART 289

Music Degree A1020D
Day/Evening • Full-Time/Part-Time

Fall Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
<td>3</td>
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<tr>
<td>ACA 122 College Student Success (2)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 121 Music Theory I</td>
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<tr>
<td>Performance Elective (7)</td>
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<tr>
<td>MUS 110 Music Appreciation</td>
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<tr>
<td>MUS 161 Applied Music I</td>
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<tr>
<td>MUS 151 Class Music I</td>
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Total: 15

Spring Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 113 Literature Based Research OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112 Argument-Based Research</td>
<td>3</td>
</tr>
<tr>
<td>MAT 161 College Algebra</td>
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<tr>
<td>MUS 122 Music Theory II</td>
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<tr>
<td>MUS 162 Applied Music II</td>
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<td>Performance Elective (7)</td>
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<td>MUS 152 Class Music II</td>
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<tr>
<td>Social/Behavioral Science Elective (1)</td>
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Total: 17

Fall Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Natural Science Elective (3)</td>
<td>3</td>
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<tr>
<td>Humanities/Fine Arts Elective (8)</td>
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<tr>
<td>MUS 221 Music Theory III</td>
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<td>MUS 261 Applied Music III</td>
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<td>Performance Elective (7)</td>
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<tr>
<td>History Elective (4)</td>
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Total: 17

Spring Semester 2

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<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Literature Elective (5)</td>
<td>3</td>
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<tr>
<td>Social/Behavioral Science Elective (1)</td>
<td>3</td>
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<tr>
<td>Music Elective (6)</td>
<td>3</td>
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<tr>
<td>MUS 222 Music Theory IV</td>
<td>3</td>
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<tr>
<td>MUS 262 Applied Music IV</td>
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<tr>
<td>Performance Elective (7)</td>
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Total: 16

(1) Select 2 courses from different subject areas: GEO 111 or GEO 130, POL 110 or POL 120, PSY 150, SOC 210, ECO 251, ECO 252.
(2) Students taking two or more developmental courses should take ACA 115 in lieu of ACA 111.
(3) Select 1 course: BIO 111, CHM 151, or BIO 110, CHM 131 & CHM 131A, PHY 110, BIO 140 & BIO 140A.
(4) Select 1 course: HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132.
(5) Select 1 course: ENG 233 or ENG 243 or ENG 131.
(6) Select 1 course: MUS 112, MUS 210, MUS 211, MUS 113, MUS 170, MUS 217, MUS 280
(7) Select 4 courses: MUS 131, MUS 132, MUS 231, MUS 232, MUS 141, MUS 142, MUS 241, MUS 242, MUS 133, MUS 134, MUS 233, MUS 234.
(8) Select 1 course: ART 111, ART 114, ART 115, COM 231, PHI 210, PHI 218, PHI 230, PHI 240, REL 110, REL 211, REL 212, REL 221.

ASSOCIATE IN SCIENCE

The Associate in Science degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of college transfer courses.

Courses are approved for transfer through the Comprehensive Articulation Agreement. Courses may also transfer through bilateral agreement between institutions. Courses offered through bilateral agreements may not transfer to all receiving institutions.

Degree A10400
Day • Full-Time

Fall Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
<td>3</td>
</tr>
<tr>
<td>ACA 122 College Transfer Success (1)</td>
<td>1</td>
</tr>
<tr>
<td>HEA 110 Personal Health/Wellness</td>
<td>3</td>
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<tr>
<td>Math Elective (5)</td>
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<tr>
<td>History Elective (2)</td>
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<td>Science Elective (3)</td>
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</table>

Total: 17-18

Note: Prerequisites must be satisfied before taking ENG 111 and MAT 171.

Spring Semester 1

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENG 112, 113 or 114 Literature</td>
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<td>Humanities/Fine Arts Elective (4)</td>
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<td>Math Elective (6)</td>
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<td>Physical Education Elective</td>
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Total: 17-18
### ASSOCIATE IN SCIENCE – BIOLOGY AND BIOLOGY EDUCATION

The semester-by-semester breakdown is a blueprint for guiding students who intend to major in biology or biology education. Students who successfully complete this course of study and who meet the requirements for admission to the university may be eligible to apply for admission to the major with junior standing.

**Degree A1040A**

**Day • Full-Time**

<table>
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<th>Fall Semester 1</th>
<th>Class</th>
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<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
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<tr>
<td>BIO 111 General Biology I</td>
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<td>4</td>
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<td>MAT 271 Calculus I</td>
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<td>PE Elective</td>
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<td>Social/Behavioral Science Elective (1)</td>
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**Total** 15

### ASSOCIATE IN SCIENCE – PRE-ENGINEERING

The Associate in Science Pre-Engineering curriculum is designed for students who intend to major in engineering. Students who successfully complete the requirements of this program will be eligible for admission to the university with junior standing. The courses listed are approved for transfer through the Comprehensive Articulation Agreement.

The semester breakdown is designed to give the students a general idea of the basic course requirements for Pre-Engineering. Different areas of engineering have different requirements in computer science and engineering courses, which must be taken into consideration.
### Degree AI040D
#### Day • Full-Time

<table>
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<th>Fall Semester 1</th>
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<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
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<td>MAT 271 Calculus I</td>
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<td>CHM 151 General Chemistry I</td>
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<td>EGR 150 Introduction to Engineering</td>
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<td>Social/Behavioral Science Elective</td>
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<th>Lab</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG 112/113 Argument/Literature Based Research</td>
<td>3</td>
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<td>MAT 272 Calculus II</td>
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<td>4</td>
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<tr>
<td>PHY 251 General Physics I</td>
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<td>Social/Behavioral Science Elective</td>
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<tr>
<td>Humanities Elective</td>
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<td>EGR 230 Engineering Materials</td>
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<table>
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<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<td>MAT 285 Differentials</td>
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<td>OR</td>
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<td>MAT 280 Linear Equations</td>
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<tr>
<td>PED 110 Fit and Well for Life</td>
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<td>Humanities/Fine Arts Elective</td>
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<td><strong>Total</strong></td>
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</table>
The programs listed on the following pages represent the various Occupational, Technical and/or Career curriculum programs that award an Associate in Applied Science Degree, Certificate, or Diploma upon completion of the program requirements.

The descriptions provide a statement of intent or purpose for each program and an overview of the courses to be taken for that program. As appropriate, the descriptions include reference to other requirements or program expectations. In addition, each program description includes a course-by-course listing of the study curriculum for the appropriate credential—degree, certificate, diploma—along with the class/lab contact hours and the course credit hours for each course. The courses are arrayed as per a full-time program of study for the fall, spring, and summer semesters, as appropriate. In some cases, the array of courses is listed for both full-time and part-time study should the student pursue the respective program on a part-time basis.

PROGRAM LISTING

Below is a listing of these Occupational/Technical programs that are presented in the pages of this chapter.

- Accounting
- Advertising and Graphic Design
- Air Conditioning, Heating, and Refrigeration Technology
- Associate Degree Nursing
- Associate in General Education
- Basic Law Enforcement Training
- Bioprocess Technology
- Business Administration
- Cardiac and Vascular Sonography
- Community Spanish Interpreter
- Computer Programming
- Cosmetology
- Criminal Justice Technology
- Criminal Justice Technology - Latent Evidence
- Early Childhood Education
- Esthetics Technology
- General Occupational Technology
- Greenhouse and Grounds Maintenance
- Heavy Equipment and Transport Technology
- Horticulture Technology
- Industrial Systems Maintenance Technology
- Interventional Cardiac and Vascular Technology
- Machining Technology
- Medical Assisting
- Medical Office Administration
- Medical Sonography
- Networking Technology
- North Carolina Truck Driver Training School
- Nuclear Medicine Technology
- Office Administration Paralegal Technology
- Pharmacy Technology
- Radiography
- School-Age Education
- Therapeutic Massage
- Welding Technology

ACCOUNTING

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.

Degree A25100
Day/Evening/Online • Full-Time

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**Electives:** ACC 140 Payroll Accounting, COE 112 Co-op Work Experience I

### Certificate C25100

**Day/Evening/Online • Part-Time**

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### Degree A30100

**Day • Full-Time/Part-Time**

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### Photography Certificate C30100

**Day/Evening • Part-Time**

**Advertising and Graphic Design**

The Advertising and Graphic Design curriculum is designed to provide students with the knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

### Certificate C25100

**Day/Evening/Online • Part-Time**

**Advertising and Graphic Design**

The Advertising and Graphic Design curriculum is designed to provide students with the knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.
professional presentation will be provided. Course work prepares the students for opportunities in portrait, industrial, commercial, and personal photography.

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**AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY**

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 systems 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.

**Degree A35100**

**Day • Full-Time**

This schedule will enable a student to enter in fall semester and earn an associate's degree in two years.

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**Diploma D35100**

**Day**

This schedule will enable a student to enter in fall semester and earn a diploma in three semesters.

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<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
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<td>AHR 133</td>
<td>HVAC Servicing</td>
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<td>AHR 140</td>
<td>All-Weather Systems</td>
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<td>ENG 102</td>
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<td>MAT 140</td>
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**Total:** 13

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**Certificate C35100**

**Full-Time/Part-Time**

Students wishing to complete any of the various certificates listed below must take those courses whenever they come up in the rotation of the standard associate degree program for either day or evening sessions. More than one semester may be required to complete the certificate desired and semesters may not be back to back.

### Refrigeration Systems

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<td>HVACR Electricity</td>
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**Total:** 13

### Heat Pumps

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### Controls

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<td>AHR 215</td>
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<td>Heating Technology</td>
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<td></td>
<td>OR</td>
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### Comfort Cooling

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### Servicing

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*Note: Requires AHR 110 or previous knowledge of basic refrigeration.*

### All-Year Systems

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**Total:** 12

*Note: Requires AHR 110 or previous knowledge of basic refrigeration.*

---

**Certificate C35100**

**Fast Track • Full-Time**

Students on the fast track can complete a certificate in eight weeks. There are two fast track sessions offered in the fall. Fast Track Session I is offered the first eight weeks of the semester and Fast Track Session II is offered the last eight weeks of the semester.

### Fall Semester (Fast Track I)

<table>
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<tr>
<th>Course Code</th>
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**Total:** 12

### Fall Semester (Fast Track II)

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<td>Heat Pump Technology</td>
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**Total:** 10
ASSOCIATE DEGREE NURSING

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

Degree A45110
Day/Evening/Weekend • Full-Time/Part-Time (Related)

FIRST LEVEL

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SECOND LEVEL

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*Courses may be taken before entering the program.

Degree A45110
LPN to ADN OPTION

Prerequisites: PSY 150, PSY 241

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*Courses may be taken prior to admission into the nursing program.

- All courses with a BIO or NUR prefix must be passed with a minimum grade of 77 “C” and in sequence by semester. Students not meeting this requirement are unable to progress in the program.
- 2 years full-time experience as an LPN is required to be considered for admission into the LPN to ADN option.
- Applicants must meet the admission requirements for the Associate Degree Nursing Program. Deadline for application is February 1st.

ASSOCIATE IN GENERAL EDUCATION

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth, and development.
The curriculum provides coursework for students seeking to strengthen and enhance their fundamental skills in reading, writing, oral communication, math, and basic use of computers.

Through these skills, students will have a sound base to pursue further education. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

### Degree A10300

**Day • Full-Time**

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**Note:** Prerequisites must be satisfied before taking ENG 111 and math electives.

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(1) Students taking two or more semesters of developmental English or reading must take ACA 115 in lieu of ACA 111.

(2) Select one: MAT 140, MAT 161.

(3) Select one sequence: HIS 121 & HIS 122 or HIS 131 & HIS 132.

(4) Select free electives from general ed and professional courses not required in this curriculum.

### Degree A10300

**Evening • Part-Time**

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**Note:** Prerequisites must be satisfied before taking ENG 111 and math electives.

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(1) Students taking two or more semesters of developmental English or reading must take ACA 115 in lieu of ACA 111.

(2) Select one: MAT 140 or MAT 161.

(3) Select free electives from general education and professional courses not required in this curriculum.

(4) Select one: ENG 113 or ENG 114.

(5) Select one: BIO 111, CHM 151, CHM 131 & CHM 131A.

(6) Select one: ART 111, MUS 110, MUS 113.

(7) Select one: ENG 233, ENG 243, ENG 272.

(8) Select one: HIS 121 & HIS 122 or HIS 131 & HIS 132.

(9) Complete the history sequence previously selected.

(10) Select one: COM 110, COM 120, COM 231, COM 232, COM 251, COM 252.

**BASIC LAW ENFORCEMENT TRAINING**

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 alcohol beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Students must successfully complete and pass all units of study which include the certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs’ Education and Training Standards Commission to receive a certificate.

**Certificate CS5120**

**Full-Time • Day**

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**BIOPROCESS TECHNOLOGY**

The Bioprocess Technology curriculum is designed to prepare individuals to work as process operators in biological products manufacturing facilities. Students will combine basic science and communication skills, manufacturing technologies, and good manufacturing practices in the course of study.

Students will be expected to develop a strong basic science foundation with a sound understanding of the major technologies employed in the industry. They will also be expected to develop collaborative and disciplined work ethics while consistently practicing problem-solving skills.

Upon successful completion of the program, individuals should possess the necessary skills to qualify for employment in a variety of bioprocessing industries.

**Degree A50440**

**Day • Full-Time**

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*Credit may be granted for successful completion of the BioWork Process Technician course.

**BUSINESS ADMINISTRATION**

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, communications, 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.

**Degree A25120**

**Day/Evening/Online • Full-Time**

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| *Electives: ACC 149 Intro to Acc Spreadsheets
ACC 140 Payroll Accounting
ACC 150 Accct Software Appl
COE 112 Co-op Work Experience I* |

**Certificate C25120**

**Day/Evening/Online • Part-Time**

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**CARDIAC AND VASCULAR SONOGRAPHY**

The Cardiac and Vascular Sonography curriculum provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures. A cardiovascular sonographer uses high frequency sound waves to produce images of the heart and vascular structures.

Course work includes effective communication and patient care skills combined with a knowledge of physics, human anatomy, physiology, and pathology, all of which are essential to obtaining high-quality sonographic images.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in cardiovascular physics, vascular physics, vascular technology, and adult echocardiography. Graduates may find employment in hospitals, physicians’ offices, mobile services, and educational institutions.

**Degree A45160**

**Day • Full-Time**

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*Courses may be taken before entering the program.

COMMUNITY SPANISH INTERPRETER

The Community Spanish Interpreter curriculum prepares individuals to work as entry-level bilingual professionals who will provide communication access in interview and interactive settings. In addition, this curriculum provides educational training for working professionals who want to acquire Spanish language skills.

Course work includes the acquisition of Spanish: grammar, structure, and sociolinguistic properties, cognitive processes associated with interpretation between Spanish and English; the structure and character of the Hispanic community; and acquisition of communication skills.

Graduates should qualify for entry-level jobs as paraprofessional bilingual employees in educational systems or a variety of community settings. Individuals may choose from part-time, full-time, or self-employment/freelance positions, or apply language skills to other human service related areas.

Degree AS5370

Day/Online • Full-Time/Part-Time

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Native Spanish Certificate CS5370

Day/Online • Part-Time

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Non-Native "Spanish Language Facilitator"
Certificate C55370
Day/Online • Part-Time

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COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING TECHNOLOGY

TheComputed Tomography and Magnetic Resonance Imaging Technology curriculum, a specialty for radiographers, prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced Level testing in Computed Tomography and/or Magnetic Resonance Imaging examinations. They may find employment in facilities that perform these imaging procedures.

This program is offered in collaboration with Edgecombe Community College and Johnston Community College.

Diploma D45200
Day • Full-Time/Part-Time

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*The above general education credits may be transferred from an accredited radiography program.
†Select 3 SHC from the following prefixes: ECO, GEO, HIS, POL, PSY, SOC.

Certificate C45200
Day • Full-Time/Part-Time

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COMPUTER PROGRAMMING

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.

Degree A25130
Day • Full-Time/Part-Time

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**OCCUPATIONAL / TECHNICAL / CAREER PROGRAMS**

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### COSMETOLOGY

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 Art examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

---

### Diploma D55140

**Day • Full-Time**

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### Fall Semester 1

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*CIS 110 – Introduction to Computers may be substituted for this course.*

---

### Certificate C55140

**Day • Full-Time**

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### Fall Semester 1

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**Certificate C55140**

**Evening • Part-Time**

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### Cosmetology Instructor Certificate C55160

The Cosmetology Instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments.

Graduates of the program may be employed as cosmetology instructors in public or private education and business.

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### CRIMINAL JUSTICE TECHNOLOGY

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.

#### Degree A55180

**Day/Online • Full-Time/Part-Time**

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CRIMINAL JUSTICE TECHNOLOGY – LATENT EVIDENCE

Latent Evidence is a concentration under the curriculum of Criminal Justice Technology. This curriculum is designed to provide knowledge of latent evidence systems and operations. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire tracks and process crime scenes. Issues and concepts of communications and the use of computers and computer-assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.

Degree A5518A
Day • Full-Time/Part-Time

EARLY CHILDHOOD EDUCATION

The Early Childhood Education curriculum prepares individuals to work with children from birth through age eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.
Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child-care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Prior to the work experience assignment, the student shall furnish a statement signed by a licensed physician that indicates the student is emotionally and physically fit to care for children. An initial test showing each student to be free of active tuberculosis is required. Effective January 1, 1996, the General Assembly passed legislation requiring all child-care providers to receive a criminal history records check. All students prior to the work experience must submit to the ECH director a Certified Criminal History Check from the Clerk of Superior Court’s office and a completed fingerprint card for submission to the State Bureau of Investigation (SBI) for criminal history check. (Section 2700 of Subchapter 3U-Child Day Care Rules on Criminal Records Check). The N.C. Division of Child Development requires completers of EDU 111 and EDU 112 or EDU 119 to be high school or GED graduates before issuing the North Carolina Early Childhood Credentials.

Students with a felony conviction may have limited certification and employment opportunities and may not be able to complete the Early Childhood Education degree.

**Early Childhood Associate Degree A55220 (Day)**

**Full-Time/Part-Time**

**Effective Term Fall 2009**

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**Grand Total: 73 / 75 hours**

**Early Childhood Associate A55220 Tracks**

**Effective Term – Fall (2009*03)**

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<tr>
<td>EDU 173 Becoming a Prof’l in ECE OR</td>
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<td>EDU 263 School-Age Program Admin.</td>
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<tr>
<td>BUS 137 Principles of Management</td>
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<td>BUS 260 Business Communication</td>
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**Total**: 14/15

### School Age Track

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<th>Credit</th>
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<td>EDU 235 School-Age Dev &amp; Program</td>
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<td>EDU 163 Classroom Mgt &amp; Instruct</td>
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**Total**: 15

### Special Needs Track

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<td>EDU 222 Learn w/Behav Disorder</td>
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<td>EDU 223 Specific Learning Disab</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>EDU 247 Sensory &amp; Physical Disab</td>
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<tr>
<td>EDU 248 Developmental Delays</td>
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**Total**: 15

### General College Transfer Track

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<tr>
<td>EDU 216 Foundations in Education Choose 10-12 credit hours*</td>
<td>4</td>
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**Total**: 14-16

*Choose 10-12 credit hours from the following prefixes. (Classes should be on the Comprehensive Articulation List): ART, BIO, BUS, CIS, ENG, HEA, HIS, MAT, MUS, PED, PHI, PSY, REL, SOC, SPA

Your advisor will have a list of courses.

**NOTES:**

A. Students will be able to choose one track of classes (minimum 14 hours) to complete the Associate in Applied Science Early Childhood Degree. The track chosen should be one that compliments your present position or focuses on your desired career track.

B. Humanities/Fine Arts Elective: Select 3 credit hours from the following: ART 111, MUS 110, PHI 210, REL 110, REL 211, REL 212

C. Math/Natural Science Elective: Select a course from the following: MAT 140, MAT 141, BIO 110, BIO 111

D. All course prerequisites must be satisfied

E. Students needing two or more semesters to complete developmental ENG and/or RED must take ACA 115 in lieu of ACA 111

F. Students enrolling in ECH classes in the Early Childhood Degree, Diploma or Certificate programs must meet placement test minimums and program admission requirements.

---

**Early Childhood Associate Diploma D55220**

**Day • Full-Time**

**Effective Term – Fall (2009*03)**

### Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Class</th>
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<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>EDU 119 Intro to Early Child Educ</td>
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<td>4</td>
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<td>ENG 111 Expository Writing</td>
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<td>EDU 151 Creative Activities</td>
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**Total**: 14

### Spring Semester I

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<td>EDU 162 Observe &amp; Assess in ECE</td>
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**Total**: 15

### Fall Semester II

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<tr>
<td>EDU 153 Health, Safety and Nutrition</td>
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<td>EDU 280 Language &amp; Literacy Exp.</td>
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<td>EDU 131 Child, Family and Community</td>
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**Total**: 16

**NOTES:**

A. All course prerequisites must be satisfied.

B. Students enrolled in ECH telecourse, internet or hybrid classes should follow guidelines on checklist available from the ECH program in the Health Science Building.

C. Students needing two or more semesters to complete developmental ENG and/or RED must take ACA 115 in lieu of ACA 111.

D. Students enrolling in ECH classes in the Early Childhood Degree, Diploma or Certificate programs must meet placement test minimums and program admission requirements.
### Early Childhood Associate Certificates C55220

**Day/Evening • Full-Time/Part-Time**

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Class</th>
<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Early Childhood Certificate (C55220C1)</td>
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<tr>
<td>EDU 119 Intro to Early Child Educ</td>
<td>4</td>
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<td>4</td>
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<td>3</td>
</tr>
<tr>
<td>EDU 153 Health, Safety and Nutrition</td>
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<td>EDU 251 Exploration Activities</td>
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OR

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Class</th>
<th>Lab</th>
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**Total**                                    |       |     |          | **16** |

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Class</th>
<th>Lab</th>
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<td>ENG 111 Expository Writing</td>
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<td>BUS 137 Principles of Management</td>
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<td>BUS 260 Business Communication</td>
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**Total**                                    |       |     |          | **15** |

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Choose 9 semester hours from the following:

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<th>Credit</th>
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<tbody>
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<tr>
<td>EDU 222 Learn w/Behav Disord</td>
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<tr>
<td>EDU 223 Specific Learning Disab</td>
<td>3</td>
<td>0</td>
<td>0</td>
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**Total**                                    |       |     |          | **15** |

<table>
<thead>
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<th>Certificate</th>
<th>Class</th>
<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
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<tbody>
<tr>
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<td>EDU 216 Foundations of Education</td>
<td>4</td>
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<td>0</td>
<td>4</td>
</tr>
<tr>
<td>EDU 263 School-Age Program Admin</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>EDU 235 School-Age Dev &amp; Program</td>
<td>3</td>
<td>0</td>
<td>0</td>
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<tr>
<td>EDU 163 Classroom Mgt &amp; Instruct</td>
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<td>0</td>
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**Total**                                    |       |     |          | **15** |

### Family Childcare Certificate (C55220C5)

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<td>EDU 146 Child Guidance</td>
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<td>EDU 153 Health, Safety and Nutrition</td>
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<tr>
<td>EDU 119 Intro. to Early Childhood Edu.</td>
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**Total**                                    |       |     |          | **16** |

### Early Childhood Infant / Toddler Care Certificate C55290

<table>
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<th>Class Lab Clinical Credit</th>
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<td>EDU 119 Intro to Early Child Educ</td>
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<td>EDU 144 Child Development I</td>
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<tr>
<td>EDU 234 Infant/Toddlers &amp; Twos</td>
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<tr>
<td>EDU 131 Child, Family &amp; Community</td>
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<td>EDU 153 Health, Safety and Nutrition</td>
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</tbody>
</table>

**Total**                                    |       |     |          | **16** |

### GENERAL OCCUPATIONAL TECHNOLOGY

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

This 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.

### Degree A55280

**Day/Evening • Full-Time/Part-Time**

**Fall Semester 1**

<table>
<thead>
<tr>
<th>Class Lab Credit</th>
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<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
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<tr>
<td>ACA 111 College Student Success</td>
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<td>1</td>
<td></td>
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<tr>
<td>Natural Science</td>
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**Total**                                    |       |     |          | **17** |

**Spring Semester 1**

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<tbody>
<tr>
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<td>Social/Behavioral Science Elective</td>
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### Fall Semester 2

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### Spring Semester 2

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<td>Humanities/Fine Art Elective</td>
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<tr>
<td>Electives (13 hours)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

*Electives - courses selected from approved college curricula.*

### Greenhouse and Grounds Maintenance

The Greenhouse and Grounds Maintenance curriculum provides individuals from special populations with experience in general horticultural principles and applications. This training provides a setting that is conducive to students’ vocational and personal growth.

Course work includes extensive hands-on experience in identification and use of horticultural materials, greenhouse production, nursery production, landscape and grounds maintenance practices, and other related topics.

Graduates should qualify for entry-level positions in the horticultural industry and related fields.

### Heavy Equipment and Transport Technology

The Heavy Equipment and Transport Technology curriculum is designed to prepare individuals with the knowledge and skills needed to service, troubleshoot, and repair medium and heavy-duty vehicles.

Course work includes the purpose, construction features, and principles of operation of medium and heavy-duty vehicles.

Graduates of the curriculum should qualify for entry-level employment opportunities in a dealership, fleet shop, or independent garage as a technician. Graduates that have met the work experience requirement should also be prepared to take the ASE certification exam.

### Degree A60240

**Day • Full-Time**

### Fall Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>ACA 111 College Student Success</td>
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<td>ENG 111 Expository Writing</td>
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<td>HET 110 Diesel Engines</td>
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<td>HET 125 Preventive Maintenance</td>
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<td>HET 128 Med/Heavy Duty Tune Up</td>
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<td>HET 118 Mechanical Orientation</td>
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<tr>
<td>HET 127 Shop Rules &amp; Regulations</td>
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### Spring Semester 1

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### Degree A60240

#### Evening • Part-Time

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### Diploma D60240

#### Day • Full-Time

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### Diploma D60240

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### HORTICULTURE TECHNOLOGY

The Horticulture Technology curriculum is designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study. Course work includes plant science, plant materials, propagation, soils, fertilizers, and pest management. Also included are courses in plant production, landscaping, and the management and operation of horticulture businesses.

Graduates should qualify for employment opportunities in nurseries, garden centers, greenhouses, landscape operations, gardens, and governmental agencies. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and the North Carolina Certified Plant Professional Examination.

### Degree A15240

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### Diploma D15240
#### Day • Landscape Technician

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#### Certificate C15240

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INDUSTRIAL SYSTEMS TECHNOLOGY

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair and install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems. Students will learn multi-craft technical skills in blueprint reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, as well as various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as lifelong learners.

A50240 • Day

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INTERVENTIONAL CARDIAC AND VASCULAR TECHNOLOGY

The Interventional Cardiac and Vascular Technology curriculum provides individuals with the knowledge and skills necessary to qualify as an entry-level Interventional Cardiac and Vascular Specialist.

Course work will include radiographic physics, radiation protection, patient care, ECG, pharmacology, anatomy and pathology. Clinical rotations will provide experiences with advanced radiographic imaging equipment and medications used to visualize human vasculature and organs.

Graduates should qualify for eligibility to apply for and take the Vascular Interventional Registry (VIR) and the Cardiac Interventional Registry (CIR) given by the American Registry for Radiologic Technologist (ARRT).

Diploma D45410  
Day • Full-Time

Summer and Fall Semester  
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*Courses may be taken before entering the program.
MACHINING TECHNOLOGY

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decisions to ensure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, government agencies, and in a wide range of specialty machining job shops.

Degree A50300
Day • Full-Time

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Diploma D50300
Day • Full-Time

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</table>

Students who wish to take courses only in specific areas may earn a certificate without related courses. Check with advisor to find out what certificates are available and when courses are offered. The student may substitute ENG to gain credit for the first year associate degree during the day schedule.

Diploma D50300
Evening • Part–Time

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Class</th>
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</table>

In order to earn a diploma, the student must pass the related courses listed below. These courses may be scheduled any time convenient for the student when offered by the College. The student should always check with his or her advisor to be sure related courses will count toward the diploma.

### Required Courses:

<table>
<thead>
<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG 101/102 Applied Communications I &amp; II</td>
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<tr>
<td>PSY 101 Applied Psychology</td>
<td>3</td>
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<tr>
<td>WLD 112 Basic Welding Processes</td>
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<td>*CIS 110 Intro to Computers</td>
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<td>0</td>
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<td>*May be substituted for PSY 101</td>
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### Certificate C50300

**Machining Technology Certificate**

<table>
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<tr>
<th>Class</th>
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<tbody>
<tr>
<td>MAC 131 Blueprint Reading: Machining I</td>
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<tr>
<td>MAC 111 Machining Technology I</td>
<td>2</td>
<td>12</td>
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<tr>
<td>DFT 119 Basic CAD</td>
<td>1</td>
<td>2</td>
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<tr>
<td>MAC 151 Machining Calculations</td>
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### CNC Certificate

<table>
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<td>MAC 124 CNC Milling</td>
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<td><strong>Total</strong></td>
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</table>

### MEDICAL ASSISTING

The Medical Assisting curriculum prepares the individual to be a multi-skilled health care professional 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.

Johnston Community College is accredited with the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Curriculum Review Board of the American Medical Assistants Endowment. Graduates are eligible to take the AAMA Certification Examination to become Certified Medical Assistants. Employment opportunities include physician's offices, health maintenance organizations, health departments, and hospitals.

### Diploma, Degree A45400

**Day • Full-Time/Part-Time**

### 1st Level

#### Fall Semester

<table>
<thead>
<tr>
<th>Class</th>
<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACA 111 College Student Success</td>
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<td>0</td>
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<tr>
<td>*ENG 111 Expository Writing</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>*BIO 163 Basic Anat &amp; Physiology</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>*OST 131 Keyboarding</td>
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<td>2</td>
<td>0</td>
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<tr>
<td>MED 110 Orientation to Med Assist</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MED 118 Medical Law and Ethics</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>*MED 121 Medical Terminology I</td>
<td>3</td>
<td>0</td>
<td>0</td>
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<tr>
<td>MED 130 Admin Office Proc I</td>
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<td><strong>Total</strong></td>
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<td><strong>19</strong></td>
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</tbody>
</table>
Spring Semester | Class | Lab | Clinical | Credit
--- | --- | --- | --- | ---
*PSY 150 General Psychology | 3 | 0 | 0 | 3
*MED 122 Medical Terminology II | 3 | 0 | 0 | 3
MED 131 Admin Office Proc II | 1 | 2 | 0 | 2
MED 140 Exam Room Procedures I | 3 | 4 | 0 | 5
MED 150 Laboratory Procedures I | 3 | 4 | 0 | 5
Total | 18

Summer Session | Class | Lab | Clinical | Credit
--- | --- | --- | --- | ---
MED 134 Medical Transcription | 2 | 2 | 0 | 3
MED 232 Medical Insurance Coding | 1 | 3 | 0 | 2
MED 260 MED Clinical Externship | 0 | 0 | 15 | 5
MED 262 Clinical Perspectives | 1 | 0 | 0 | 1
Total | 11

Students may elect to exit with a diploma (48 hours). Requirements for graduates to apply to take the Medical Assisting Certification Exam will have been met at this point.

2nd Level

Fall Semester | Class | Lab | Clinical | Credit
--- | --- | --- | --- | ---
*ENG 112 Argument-Based Research | 3 | 0 | 0 | 3
*BIO 271 Pathophysiology | 3 | 0 | 0 | 3
*NUT 110 Nutrition | 3 | 0 | 0 | 3
MED 240 Exam Room Procedures II | 3 | 4 | 0 | 5
Total | 14

Spring Semester | Class | Lab | Clinical | Credit
--- | --- | --- | --- | ---
*Humanities Elective | 3 | 0 | 0 | 3
MED 264 Medical Assisting Overview | 2 | 0 | 1 | 2
MED 272 Drug Therapy | 3 | 0 | 0 | 3
MED 276 Patient Education | 1 | 2 | 0 | 2
MED 270 Symptomatology | 2 | 2 | 0 | 3
Total | 13

*Courses may be taken before entering the program.

MEDICAL OFFICE ADMINISTRATION

This curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

Degree A25310
Day • Full-Time/Part-Time

Fall Semester 1 | Class | Lab | Credit
--- | --- | --- | ---
ENG 111 Expository Writing | 3 | 0 | 3
ACA 111 College Student Success | 1 | 0 | 1
OST 132 Keyboarding Skill Building | 1 | 2 | 2
Humanities/Fine Arts Elective | 3 | 0 | 3
CIS 110 Introduction to Computers | 2 | 2 | 3
MED 121 Medical Terminology I | 3 | 0 | 3
Total | 15

Spring Semester 1 | Class | Lab | Credit
--- | --- | --- | ---
ENG 112 Argument-Based Research | 3 | 0 | 3
OST 164 Text Editing Applications | 3 | 0 | 3
OST 148 Medical Coding Billing & Insurance | 3 | 0 | 3
OST 136 Word Processing | 2 | 2 | 3
MED 122 Medical Terminology II | 3 | 0 | 3
Social/Behavioral Science Elective | 3 | 0 | 3
Total | 18

Fall Semester 2 | Class | Lab | Credit
--- | --- | --- | ---
OST 134 Text Entry and Formatting | 2 | 2 | 3
ACC 120 Principles of Financial Accounting | 3 | 2 | 4
OST 247 Procedure Coding | 1 | 2 | 2
OST 241 Medical Office Transcription I | 1 | 2 | 2
BUS 260 Business Communications | 3 | 0 | 3
OST 149 Medical Legal Issues | 3 | 0 | 3
Total | 17

Spring Semester 2 | Class | Lab | Credit
--- | --- | --- | ---
OST 289 Administrative Office Management | 2 | 2 | 3
ACC 149 Intro to Acc Spreadsheets | 1 | 2 | 2
MAT 140 Survey of Mathematics | 3 | 0 | 3
OST 243 Medical Office Simulation | 2 | 2 | 3
DBA 110 Database Concepts and Appl | 2 | 3 | 3
OST 248 Diagnostic Coding | 1 | 2 | 2
ACC 150 Accounting Software Application | 1 | 2 | 2
Total | 18

Medical Records Technician Certificate C25310
Day • Part-Time

Fall Semester 1 | Class | Lab | Credit
--- | --- | --- | ---
MED 121 Medical Terminology I | 3 | 0 | 3
CIS 110 Introduction to Computers | 2 | 2 | 3
Total | 6
### Medical Transcription Certificate C25310
**Day/Online • Part-Time**

<table>
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<tr>
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<th>Lab</th>
<th>Credit</th>
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<tbody>
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<tr>
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<tr>
<td>OST 184 Records Management</td>
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<td>OST 149 Medical Legal Issues</td>
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### Health Insurance Specialist C25310
**Day • Part-Time**

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<th>Credit</th>
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### Medical Administrative Specialist Certificate C25310
**Day • Part-Time**

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### Medical Sonography
The Medical Sonography curriculum provides knowledge and clinical skills in the application of high-frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

### Degree A45440
**Day • Full-Time**

<table>
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<th>Semester</th>
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<th>Lab</th>
<th>Clinical</th>
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<td><em>BIO 163 Basic Anatomy &amp; Physiology</em></td>
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### OCCUPATIONAL / TECHNICAL / CAREER PROGRAMS

#### Spring Semester 1

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<td>SON 140 Gynecologic Sonography</td>
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**Total** 18

#### Summer Session 1

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<td>SON 274 Neurosonology</td>
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**Total** 12

#### Fall Semester 2

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<td>SON 225 Case Studies</td>
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**Total** 14

#### Spring Semester 2

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**Total** 16

*Courses may be taken before entering the program.*

### NETWORKING TECHNOLOGY

The Networking Technology curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

### North Carolina Truck Driver Training School

The North Carolina Truck Driver Training School curriculum prepares individuals to drive a tractor trailer rig. This program teaches proper driving procedures, safe driver responsibilities, commercial motor vehicle laws and regulations, and the basic principles and practices for operating commercial vehicles.

Course work includes vehicle law and regulations, map reading and trip planning, vehicle maintenance, safety procedures, daily logs, defensive driving, freight handling security, and fire protection. Highway driving, training range exercises, and...
classroom lectures are used to develop the student’s knowledge and skills.

All Commercial Driver’s License skills tests are administered on site by the school’s third party examiners. Graduates of the curriculum are employable by commercial trucking firms. They may also become owner-operators or work as private contract haulers.

After satisfactory completion of all course requirements, students receive a Class A Commercial Driver’s License, DOT 380 certificate, and a Johnston Community College Curriculum Certificate. All students “Must be a US citizen or permanent resident alien.”

Students with a felony conviction may have limited certification and employment opportunities.

Full-time day classes are Monday – Friday from 7:00 a.m. to 6:00 p.m. for eight weeks six times per year. Actual start and end dates vary each calendar year.

Part-time night plus weekend classes are Monday – Thursday from 6:00 to 10:00 p.m. plus Saturday and Sunday from 7:00 a.m. to 6:00 p.m. for 12 weeks. These classes are conducted four times each year. Actual class dates vary each calendar year. Approximate class dates are:

- January – March
- Late March – June
- Late June – Mid September
- Late September – Mid December

**NUCLEAR MEDICINE TECHNOLOGY**

The Nuclear Medicine Technology curriculum provides the clinical and didactic experience necessary to prepare students to qualify as entry-level nuclear medicine technologists.

Students will acquire the knowledge and skills necessary to properly perform clinical procedures. These skills include patient care, use of radioactive materials, operation of imaging and counting instrumentation, and laboratory procedures.

Graduates may be eligible to apply for certification/registration examinations given by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

### Associate A45460
**Day • Full-Time**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Class</th>
<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester 1</strong></td>
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**Diploma D45460**  
**Day • Full-Time**

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*Courses may be taken prior to entering the NMT diploma program.*

**OFFICE ADMINISTRATION**

The Office Administration 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.

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**Degree A25370**  
**Day • Full-Time/Part-Time**

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*Electives: COE 112 Co-op Work Experience I, ACC 150 Acct Software Applications*

**Certificate C25370**  
**Day • Part-Time**

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### Microsoft Office Certificate C25370

**Day/Distance Learning • Part-Time**

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### PARALEGAL TECHNOLOGY

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, criminal law, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

The Paralegal Technology degree curriculum is designed for students who have a high school diploma or equivalent before entering the program. A diploma curriculum is available for students who already have a bachelor's degree or equivalent. The Title Searching certificate curriculum is for individuals who are currently employed as a paralegal or are in the real estate business and desire additional skills in this area. The degree and diploma programs are recognized by the North Carolina State Bar as qualified paralegal studies programs for purposes of certification.

### Degree A25380

**Day/Online • Full-Time/Part-Time**

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### Degree A25380

**Part-Time • Class Lab Credit**

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**Diploma D25380**

**Day • Full-Time/Part-Time**

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**Certificate C25380**

**Day/Evening • Full-Time/Part-Time**

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**PHARMACY TECHNOLOGY**

The Pharmacy Technology Program prepares individuals to assist the pharmacist in duties that a technician can legally perform and to function within the boundaries prescribed by the pharmacist and the employment agency.

Students will prepare prescription medications, mix intravenous solutions and other specialized medications, update patient profiles, maintain inventories, package medications in unit-dose or med-card form, and gather data used by pharmacists to monitor drug therapy.

Employment opportunities include retail, hospitals, nursing homes, research laboratories, wholesale drug companies, and pharmaceutical manufacturing facilities. Graduates from the program may be eligible to take the National Certification Examination to become a certified pharmacy technician.

**Associate A45580**

**Day • Full-Time**

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*Courses may be taken prior to entering the program.

### Radiography

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists’ national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians’ offices, medical laboratories, government agencies, and industry.

### Degree A45700

**Day • Full-Time/Part-Time (Related)**

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*Courses may be taken before entering the program.

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### School-Age Education Associate Degree

This curriculum prepares individuals to work with children in elementary through middle grades in diverse learning environments. Students will combine learned theories with practice in actual settings with school-age children under the supervision of qualified teachers.

Course work includes child growth/development; computer technology in education; physical/nutritional needs of school-age children; care and guidance of school-age children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of school-age populations.

Graduates are prepared to plan and implement developmentally appropriate programs in school-aged environments. Employment opportunities include school-age teachers in child care programs, before/after-school programs, paraprofessional positions in public/private schools, recreational centers, and other programs that work with school-age populations.

**Degree A55440**

**Fall 2009 • Full-Time/Part-Time**

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### Fall Semester II

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**Electives:**

- Humanities/Fine Arts Elective  
  Select 3 credit hours from the following: ART 111, MUS 110, PHI 210, REL 110, REL 211, REL 212

- Math/Natural Science Elective  
  Select one course from the following: MAT 140, MAT 141, BIO 110, BIO 111

- Social/Behavioral Science Elective  
  PSY 241, PSY 243, PSY 246, PSY 263, PSY 281  
  SOC 210, SOC 213, SOC 220, HIS 112, HIS 131, HIS 132

### Therapeutic Massage

The Therapeutic Massage curriculum prepares graduates to work in direct client care setting to provide manipulation, methodical pressure, friction, and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities in North Carolina may be found in hospitals, rehabilitation centers, health departments, home
health, medical offices, nursing homes, spas, health and sports clubs, and private practice. Graduates may be eligible to take the National Certification Exam for Therapeutic Massage and Bodywork.

**Degree A45750**  
**Diploma D45750**  
**Certificate C45750**  
**Day • Full-Time/Part-Time**

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Upon successful completion of these requirements, the student is eligible for a diploma and may apply to the N.C. Board of Massage and Bodywork Therapy for licensure.

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*Courses may be taken before entering the program.

**WELDING TECHNOLOGY**

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 non-destructive 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.

**Certificate C50420**  
**Diploma D50420**  
**Day/Evening • Full-Time/Part-Time**

**MIG Certificate**

<table>
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<td>WLD 141 Symbols &amp; Specifications</td>
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<tr>
<td>BPR 111 Blueprint Reading</td>
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<td>WLD 112 Basic Welding</td>
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<tr>
<td>WLD 121 GMW (MIG) FCAW/Plate</td>
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**Stick/TIG Certificate**

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*Students desiring to complete a diploma may follow this schedule and add ACA 111, MAT 101, and ENG 102.
# COURSE DESCRIPTIONS

## COURSE CODES AND TITLES

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<td>Air Conditioning, Heating &amp; Refrigeration</td>
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*Please note: This list is not exhaustive and does not represent all courses available.*
**Prerequisite** - Some courses have prerequisite requirements that must be met prior to enrollment. Prerequisites may be waived by written permission from the department chair.

**Corequisite** - Corequisite courses are to be taken together.

**Hours** are listed after the course title in the following order: Class, Lab, Clinical, and Credit.

### ACA - ACADEMIC RELATED

**ACA 111 College Student Success** (1 0 0 1)
Prerequisites: None; Corequisites: None
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. This course is also available through the Virtual Learning Community (VLC).

**ACA 115 Success & Study Skills** (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

**ACA 118 College Study Skills** (1 2 0 2)
Prerequisites: None; Corequisites: None
This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

**ACA 122 College Transfer Success** (1 0 0 1)
Prerequisites: None; Corequisites: None
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### ACC - ACCOUNTING

**ACC 120 Principles of Financial Accounting** (3 2 0 4)
Prerequisites: None; Corequisites: None
This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**ACC 121 Principles of Managerial Accounting** (3 2 0 4)
Prerequisites: ACC 120; Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting, and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**ACC 131 Federal Income Taxes** (2 2 0 3)
Prerequisites: None; Corequisites: None
This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Topics include tax law, electronic research and methodologies, and the use of technology for the preparation of individual and business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax laws, and complete federal tax returns for individuals, partnerships, and corporations. This course is also available through the Virtual Learning Community (VLC).

**ACC 140 Payroll Accounting** (1 2 0 2)
Prerequisites: ACC 115 or ACC 120; Corequisites: 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 using appropriate technology. This course is also available through the Virtual Learning Community (VLC).
ACC 149 Intro to Acc Spreadsheets (1 2 0 2)  
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 Acct Software Appl (1 2 0 2)  
Prerequisites: ACC 115 or ACC 120; Corequisites: None  
This course introduces microcomputer applications related to 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. This course is also available through the Virtual Learning Community (VLC).

ACC 152 Adv Software Appl (1 2 0 2)  
Prerequisites: ACC 150; Corequisites: None  
This course provides continued exposure to commercial accounting software and the opportunity to refine skills developed in ACC 150. Emphasis is placed on advanced applications of software packages. Upon completion, students should be able to use commercial software to complete complex accounting tasks.

ACC 220 Intermediate Accounting I (3 2 0 4)  
Prerequisites: ACC 120; 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 an extensive analysis of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC 225 Cost Accounting (3 0 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 analytical problem-solving ability for the topics covered. This course is also available through the Virtual Learning Community (VLC).

ACC 240 Gov & Not-for-Profit Acct (3 0 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 analytical problem-solving ability for the topics covered.

ACC 269 Audit & Assurance Servcs (3 0 0 3)  
Prerequisites: ACC 220; Corequisites: None  
This course introduces selected topics pertaining to the objectives, theory, and practices in engagements providing auditing and other assurance services. Topics will include planning, conducting, and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

ACC 270 International Accounting (3 0 0 3)  
Prerequisites: ACC 120; Corequisites: None  
This course includes identifying, recording, and interpreting financial information for accounting systems used in different countries. Topics include current exchange rates, methods of setting and selecting transfer prices, practices used to account for rates of inflation, and major types of taxes. Upon completion, students should be able to describe accounting systems and their impacts on different currencies and demonstrate a basic knowledge of international accounting. This course is a unique concentration requirement in the International Business concentration in the Business Administration program.

AHR - AIR CONDITIONING, HEATING, AND REFRIGERATION

AHR 110 Intro to Refrigeration (2 6 0 5)  
Prerequisites: None; Corequisites: None  
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 0 3)  
Prerequisites: None; Corequisites: None  
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 0 4)  
Prerequisites: None; Corequisites: None  
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 0 4)  
Prerequisites: None; 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 understand and analyze system performance and perform routine service procedures.

AHR 114 Heat Pump Technology (2 4 0 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 diagnose and repair common residential and commercial comfort system controls.

AHR 130 HVAC Controls (2 2 0 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 analysis 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 0 4)  
Prerequisites: None; Corequisites: AHR 112 or AHR 113  
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 140 All-Weather Systems (1 3 0 2)  
Prerequisites: AHR 112 or AHR 113; Corequisites: None  
This course covers the principles of combination heating and cooling systems including gas-electric, all-electric, 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 180 HVACR Customer Relations (1 0 0 1)  
Prerequisites: None; 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 0 2)  
Prerequisites: None; Corequisites: None  
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 0 3)  
Prerequisites: None; Corequisites: None  
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.

AHR 212 Advanced Comfort System (2 6 0 4)  
Prerequisites: AHR 114; Corequisites: None  
This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.

AHR 215 Commercial HVAC Controls (1 3 0 2)  
Prerequisites: AHR 111 or ELC 111; Corequisites: None  
This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.
ART 240 Hydronic Heating  (1 3 0 2)
Prerequisites:  AHR 112; Corequisites:  None
This course covers the accepted procedures for proper design, installation, and balance of hydronic heating systems for residential or commercial buildings. Topics include heating equipment; pump, terminal unit, and accessory selection; piping system selection and design; and pipe sizing and troubleshooting. Upon completion, students should be able to assist with the proper design, installation, and balance of typical hydronic systems.

ART 250 HVAC System Diagnostics  (0 4 0 2)
Prerequisites:  None; Corequisites:  AHR 212
This course is a comprehensive study of air conditioning, heating, and refrigeration system diagnostics and corrective measures. Topics include advanced system analysis, measurement of operating efficiency, and inspection and correction of all major system components. Upon completion, students should be able to restore a residential or commercial AHR system so that it operates at or near manufacturers’ specifications.

ART - ART

ART 111 Art Appreciation  (3 0 0 3)
Prerequisites:  None; Corequisites:  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 113 Art Methods and Materials  (2 2 0 3)
Prerequisites:  None; Corequisites:  None
This course provides an overview of media and techniques. Emphasis is placed on exploration and manipulation of materials. Upon completion, students should be able to demonstrate familiarity with a variety of methods, materials, and processes. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 114 Art History Survey I  (3 0 0 3)
Prerequisites:  None; 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.

ART 115 Art History Survey II  (3 0 0 3)
Prerequisites:  None; 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.

ART 116 Survey of American Art  (3 0 0 3)
Prerequisites:  None; Corequisites:  None
This course covers the development of American art forms from colonial times 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.

ART 121 Design I  (0 6 0 3)
Prerequisites:  None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 122 Design II  (0 6 0 3)
Prerequisites:  ART 121; Corequisites:  None
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply
This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 131 Drawing I (0 6 0 3)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 132 Drawing II (0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 135 Figure Drawing I (0 6 0 3)
Prerequisites: ART 131; Corequisites: None
This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 140 Basic Painting (0 4 0 2)
Prerequisites: None; Corequisites: None
This course introduces the mechanics of painting. Emphasis is placed on the exploration of painting media through fundamental techniques. Upon completion, students should be able to demonstrate a basic understanding and application of painting. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 171 Computer Art I (0 6 0 3)
Prerequisites: None; Corequisites: None
This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 212 Gallery Assistantship I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 214 Portfolio and Résumé (0 2 0 1)
Prerequisites: None; Corequisites: None
This course covers résumé writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective résumé. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 222 Wood Design I (0 6 0 3)
Prerequisites: None; Corequisites: None
This course introduces the historical and contemporary design concepts and their application to the construction of functional and sculptural wood forms. Emphasis is placed on the mastery of hand and power tools. Upon completion, students should be able to demonstrate appropriate use of tools to create unique designs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 223 Wood Design II (0 6 0 3)
Prerequisites: ART 222; Corequisites: None
This course provides a continuation of the skills and techniques used in ART 222. Emphasis is placed on woodcarving and other processes. Upon completion, students should be able to use original designs in the creation of functional and sculptural forms. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 231 Printmaking I (0 6 0 3)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
employing brush, knife, scumbling, and glazing techniques.

ART 232 Printmaking II (0 6 0 3)
Prerequisites: ART 231; Corequisites: None
This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 235 Figure Drawing II (0 6 0 3)
Prerequisites: ART 135; Corequisites: None
This course extends the study and rendering of the draped and undraped human figure. Emphasis is placed on the exploration of materials and approaches to drawing. Upon completion, students should be able to demonstrate creativity in the representation of the figure. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 240 Painting I (0 6 0 3)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 241 Painting II (0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 242 Landscape Painting (0 6 0 3)
Prerequisites: ART 240; Corequisites: None
This course introduces and practices the skills and techniques of open-air painting. Emphasis is placed on techniques of painting summer foliage, skies, and mountains, and the elements of aerial perspective. Upon completion, students should be able to complete an open-air landscape painting employing brush, knife, scumbling, and glazing techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 260 Photography Appreciation (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the origins and historical development of photography. Emphasis is placed on the study of composition and history of photography as an art form. Upon completion, students should be able to recognize and produce, using color transparencies, properly exposed, well-composed photographs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 261 Photography I (0 6 0 3)
Prerequisites: None; Corequisites: None
This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 262 Photography II (0 6 0 3)
Prerequisites: ART 261; Corequisites: None
This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposure. Emphasis is placed on personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 263 Color Photography (0 6 0 3)
Prerequisites: ART 262; Corequisites: None
This course provides an introduction to the procedures and processes involved in color photography. Emphasis is placed on the study of light, filtration, exposure, and films along with the processing and printing of color negatives. Upon completion, students should be able to demonstrate an understanding of color principles, theories, and processes by using them creatively in the production of color prints. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 264 Digital Photography I (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces digital photographic equipment, theory, and processes. Emphasis is placed on camera operation,
composition, computer photo manipulation, and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 265 Digital Photography II (1 4 0 3)**
Prerequisites: ART 264; Corequisites: None
This course provides exploration of the concepts and processes of photo manipulation through complex composite images, special effects, color balancing, and image/text integration. Emphasis is placed on creating a personal vision and style. Upon completion, students should be able to produce well-executed images using a variety of photographic and photo manipulative approaches. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 266 Videography I (0 6 0 3)**
Prerequisites: None; Corequisites: None
This course introduces various aspects of basic video production including concept development, scripting, camera operation, and post-production. Emphasis is placed on creative expression, camera handling, story boarding, and editing. Upon completion, students should be able to demonstrate a basic understanding of video camera operation and production techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 267 Videography II (0 6 0 3)**
Prerequisites: ART 266; Corequisites: None
This course is designed to provide a framework for the production of a long-term video project. Emphasis is placed on realization of the unique creative vision. Upon completion, students should be able to produce a thematically coherent, edited video with sound and titling. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 271 Computer Art II (0 6 0 3)**
Prerequisites: ART 171; Corequisites: None
This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command of computer systems and applications to express their personal vision. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 275 Introduction to Commercial Art (0 6 0 3)**
Prerequisites: None; Corequisites: None
This course introduces the materials and techniques used in creative layout design for publication. Emphasis is placed on design for advertising in a variety of techniques and media including computer graphics. Upon completion, students should be able to demonstrate competence in manual camera-ready layout design and computer graphics literacy. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 281 Sculpture I (0 6 0 3)**
Prerequisites: None; 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 demonstrate competence in a variety of sculptural approaches. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 282 Sculpture II (0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 283 Ceramics I (0 6 0 3)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 284 Ceramics II (0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ART 288 Studio (0 6 0 3)**
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ART 289 Museum Study (2 2 0 3)
Prerequisites: None; Corequisites: 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ATR - AUTOMATION AND ROBOTICS

ATR 280 Robotic Fundamentals (3 2 0 4)
Prerequisites: None; Corequisites: None
This course covers application, programming, and maintenance fundamentals for robotic devices. Emphasis is placed on terminology, problem solving, robotic systems controls, and hands-on projects. Upon completion, students should be able to apply basic concepts in application, programming, and robotic control systems.

BIO - BIOLOGY

BIO 110 Principles of Biology (3 3 0 4)
Prerequisites: None; Corequisites: None
This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 111 General Biology I (3 3 0 4)
Prerequisites: None; Corequisites: 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 0 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 organismal and ecological levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 120 Introductory Botany (3 3 0 4)
Prerequisites: BIO 110 or BIO 111; Corequisites: None
This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 140 Environmental Biology (3 0 3 3)
Prerequisites: None; Corequisites: None
This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 140A Environmental Biology Lab (0 3 0 1)
Prerequisites: None; Corequisites: BIO 140
This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

BIO 163 Basic Anat & Physiology (4 2 0 5)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 165 Anatomy and Physiology I** (3 3 0 4)
Prerequisites: None; Corequisites: None
This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 166 Anatomy and Physiology II** (3 3 0 4)
Prerequisites: BIO 165; Corequisites: None
This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 175 General Microbiology** (2 2 0 3)
Prerequisites: BIO 110 or BIO 111 or BIO 163 or BIO 165 or BIO 168; Corequisites: None
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 235 Ornithology** (3 3 0 4)
Prerequisites: BIO 110 or BIO 111; Corequisites: None
This course introduces the biology of birds. Emphasis is placed on the systematics, recognition, distribution, anatomy, physiology, behavior, and ecology of birds. Upon completion, students should be able to identify various avian species and demonstrate a knowledge of their biology and ecology. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 242 Natural Resource Conservation** (3 0 0 3)
Prerequisites: None; Corequisites: None
This course describes the importance of natural resources and their role in our environment. Emphasis is placed on the physical, biological, and ecological principles underlying natural resource conservation with attention to the biological consequences of human impacts. Upon completion, students should be able to demonstrate an understanding of natural resource conservation. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BIO 271 Pathophysiology** (3 0 0 3)
Prerequisites: BIO 163, BIO 166, or BIO 169;
Corequisites: None
This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**BIO 275 Microbiology** (3 3 0 4)
Prerequisites: BIO 110, BIO 112, BIO 163, BIO 165, or BIO 168;
Corequisites: None
This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**BPM - BIOPROCESS MANUFACTURING TECHNOLOGY**

**BPM 110 Bioprocess Practices** (3 4 0 5)
Prerequisites: None; Corequisites: None
This course provides a study of plant operations including various plant utility systems and detailed study of the varied plant environments in a bioprocessing facility. Emphasis is placed on quality mindset and principles of validation through applications of monitoring procedures. Upon completion, students should be able to demonstrate the rigors of industry regulation and its
This course covers the interpretation of blueprints and sketches and schematics commonly used in industry. Emphasis is placed on pH, temperature, pressure and flow rates, as well as spectrophotometry, and biochemical and chemical analytical methods. Upon completion, students should be able to demonstrate and perform many aspects of process monitoring.

**BPM 112 Upstream Bioprocessing (3 4 0 5)**
Prerequisites: BPM 111; Corequisites: None
This course introduces techniques involved in cell growth and fractionation. Topics include fermentation theory and application, as well as cell harvesting, cell disruption, and fractionation methods. Upon completion, students should be able to grow cells as well as isolate and collect various fractions.

**BPM 113 Downstream Bioprocessing (3 3 0 4)**
Prerequisites: BPM 111 and CHM 131 and CHM 131A; Corequisites: None
This course introduces a variety of techniques involved in separation procedures. Topics include extraction and precipitation, concentration and molecular filtration methods as well as different types of chromatography. Upon completion, students should be able to perform most separation procedures with an understanding of industrial scale procedures.

**BPR - BLUEPRINT READING**

**BPR 111 Blueprint Reading (1 2 0 2)**
Prerequisites: None; Corequisites: 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. This course is also available through Virtual Learning Community (VLC).

**BPR 115 Electric/Fluid Power Diagrams (1 2 0 2)**
Prerequisites: None; Corequisites: None
This course covers sketching of detail and assembly drawings and reading of hydraulic, pneumatic, electrical, mechanical, and piping schematics. Emphasis is placed on interpretation and communication skills utilizing sketches, symbols, diagrams, and other related topics. Upon completion, students should be able to read, demonstrate an understanding of, and draw sketches and schematics commonly used in industry.

**BPR 130 Blueprint Reading/Const (1 2 0 2)**
Prerequisites: None; 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.

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**BUS - BUSINESS**

**BUS 110 Introduction to Business (3 0 0 3)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**BUS 115 Business Law I (3 0 0 3)**
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**BUS 121 Business Math (2 2 0 3)**
Prerequisites: None; 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. This course is also available through the Virtual Learning Community (VLC).

**BUS 137 Principles of Management (3 0 0 3)**
Prerequisites: None; 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. This course is also available through the Virtual Learning Community (VLC). This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
BUS 147 Business Insurance  (3 0 0 3)
Prerequisites: None; 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 152 Human Relations  (3 0 0 3)
Prerequisites: None; 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 230 Small Business Management  (3 0 0 3)
Prerequisites: None; 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. This course is also available through the Virtual Learning Community (VLC).

BUS 260 Business Communication  (3 0 0 3)
Prerequisites: ENG 111; Corequisites: None
This 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 workplace. This course is also available through the Virtual Learning Community (VLC).

CAT - COMPUTED TOMOGRAPHY
Program enrollment required to take CAT courses.

CAT 210 CT Physics & Equipment  (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers the system operations and components, image processing and display, image quality, and artifacts in computed tomography. Emphasis is placed on the data acquisition components, tissue attenuation conversions, image manipulation, and factors controlling image resolution. Upon completion, students should be able to understand the physics and instrumentation used in computed tomography.

CAT 211 CT Procedures  (4 0 0 4)
Prerequisites: None; Corequisites: CAT 210
This course is designed to cover specialized patient care, cross-sectional anatomy, contrast media, and scanning procedures in computed tomography. Emphasis is placed on patient assessment and monitoring, contrast agents’ use, radiation safety, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of the imaging procedures in computed tomography.

CAT 231 CT Clinical Practicum  (0 0 33 11)
Prerequisites: None; Corequisites: None
This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

CET - COMPUTER ENGINEERING TECHNOLOGY

CET 245 Internet Servers  (2 3 0 3)
Prerequisites: CSC 134 or CSC 151; Corequisites: None
This course covers the setup and management of Internet server hardware and software. Topics include TCP/IP, FTP, SMTP, and SNMP; installation and configuration of server software for WWW, FTP, DNS, news, mail, and listserv services; and other topics. Upon completion, students should be able to set up and maintain Internet servers.

CHM - CHEMISTRY

CHM 131 Introduction to Chemistry  (3 0 0 3)
Prerequisites: None; Corequisites: CHM 131A
This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CHM 131A Intro to Chemistry Lab  (0 3 0 1)
Prerequisites: None; Corequisites: CHM 131
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.
CHM 132 Organic and Biochemistry  
**Prerequisites:** CHM 131 and CHM 131A or CHM 151;  
**Corequisites:** None  
This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).

CHM 151 General Chemistry I  
**Prerequisites:** None; Corequisites: None  
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermodynamics, 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 understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

CIS 110 Introduction to Computers  
**Prerequisites:** None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).

CIS 111 Basic PC Literacy  
**Prerequisites:** None; Corequisites: None  
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. This course is also available through the Virtual Learning Community (VLC).

CIS 115 Intro to Prog & Logic  
**Prerequisites:** MAT 070, MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 161, MAT 171, or MAT 175;  
**Corequisites:** None  
This course introduces computer programming and problem solving in a structured program logic environment. 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option). This course is also available through the Virtual Learning Community (VLC).

CIS 126 Graphics Software Intro  
**Prerequisites:** None; Corequisites: None  
This course provides an introduction to graphic design and execution of pictorial graphics using a variety of software packages. Emphasis is placed on creation and manipulation of images using graphic design software. Upon completion, students should be able to create graphic designs and incorporate these designs into printed publications.

CJC - CRIMINAL JUSTICE

CJC 100 Basic Law Enforcement Training  
**Prerequisites:** None; 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.

CJC 111 Intro to Criminal Justice  
**Prerequisites:** None; Corequisites: None  
This course introduces the components and processes of the criminal justice system. Topics include history, structure, func-
tions, 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

CJC 112 Criminology (3 0 0 3)
Prerequisites: None; 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 Juvenile Justice (3 0 0 3)
Prerequisites: None; Corequisites: None
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 0 0 3)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

CJC 131 Criminal Law (3 0 0 3)
Prerequisites: None; 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 (3 0 0 3)
Prerequisites: None; 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 (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers the history, major philosophies, components, and current practices 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

CJC 144 Crime Scene Processing (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces the theories and practices of crime scene processing and investigating. Topics include legal considerations at the crime scene, processing indoor and outdoor scenes, recording, note taking, collection and preservation of evidence and submission to the crime laboratory. Upon completion, the student should be able to evaluate and search various crime scenes and demonstrate the appropriate techniques. This course is a unique concentration requirement in the Latent Evidence concentration in the Criminal Justice Technology Program.

CJC 146 Trace Evidence (2 3 0 3)
Prerequisites: None; Corequisites: None
This course provides a study of trace evidence as it relates to forensic science. Topics include collection, packaging, and preservation of trace evidence from crime scenes such as bombings, fires and other scenes. Upon completion, students should be able to demonstrate the fundamental concepts of trace evidence collection, preservation and submission to the crime laboratory. This course is a unique concentration requirement in the Latent Evidence concentration in the Criminal Justice Technology Program.

CJC 212 Ethics & Community Relations (3 0 0 3)
Prerequisites: None; 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 213 Substance Abuse  (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

CJC 214 Victimology (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims’ roles, and current victim assistance programs.

CJC 215 Organization & Administration (3 0 0 3)
Prerequisites: None; 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 0 4)
Prerequisites: None; 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 (3 0 0 3)
Prerequisites: None; 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 231 Constitutional Law (3 0 0 3)
Prerequisites: None; 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.

CJC 244 Footwear and Tire Imprints (2 3 0 3)
Prerequisites: None; Corequisites: None
This course provides a study of the fundamental concepts of footwear and tire imprint evidence as related to forensic science. Topics include proper photographic recording, casting, recognition of wear patterns and imprint identification. Upon completion, the student should be able to recognize, record, photograph, and identify footwear and tire imprints.

CJC 245 Friction Ridge Analysis (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces the basic elements of fingerprint technology and techniques applicable to the criminal justice field. Topics include the history and meaning of fingerprints, pattern types and classification, filing sequence, searching and referencing. Upon completion, students should be able to discuss and demonstrate the fundamental techniques of basic fingerprint technology. This course is a unique concentration requirement in the Latent Evidence concentration in the Criminal Justice Technology Program.

CJC 246 Adv Friction Ridge Analysis (2 3 0 3)
Prerequisites: CJC 245; Corequisites: None
This course introduces the theories and processes of advanced friction ridge analysis. Topics include evaluation of friction ridges, chart preparation, comparative analysis for valued determination rendering proper identification, chemical enhancement and AFIS preparation and usage. Upon completion, students must show an understanding of proper procedures for friction ridge analysis through written testing and practical exercises. This course is a unique concentration requirement in the Latent Evidence concentration in the Criminal Justice Technology Program.

CJC 250 Forensic Biology I (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers important biological principles that are applied in the crime laboratory. Topics include forensic toxicology, forensic serology, microscopy, and DNA typing analysis, with an overview of organic and inorganic analysis. Upon completion, students should be able to articulate how a crime laboratory processes physical evidence submitted by law enforcement agencies.

CJC 251 Forensic Chemistry I (3 2 0 4)
Prerequisites: None; Corequisites: None
This course provides a study of the fundamental concepts of
chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

**COE - COOPERATIVE EDUCATION**

**COE 110 World of Work (1 0 0 1)**
Prerequisites: None; Corequisites: None
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 (0 0 10 1)**
Prerequisites: None; Corequisites: None
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 (0 0 20 2)**
Prerequisites: None; Corequisites: None
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 115 Work Exp Seminar I (1 0 0 1)**
Prerequisites: None; Corequisites: COE 111, COE 112, COE 113, or COE 114
This course covers basic knowledge necessary for gaining and maintaining employment in the Community Spanish Interpreter program. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully complete the cooperative work assignments involved in the Spanish Interpreting concentration.

**COE 121 Co-op Work Experience II (0 0 10 1)**
Prerequisites: None; Corequisites: None
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 Co-op Work Experience II (0 0 20 2)**
Prerequisites: None; Corequisites: None
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 125 Work Exp Seminar II (1 0 0 1)**
Prerequisites: None; Corequisites: COE 121 and COE 122 and COE 123 and COE 124
This course is a once a week, one-hour seminar to discuss the problems, questions, and successes of the Co-Op Work Experience. It provides an opportunity for teacher/student evaluation of the students work experience and provides guidance for successful completion of the experience.

**COE 131 Co-op Work Experience III (0 0 10 1)**
Prerequisites: None; Corequisites: None
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 135 Work Exp Seminar III (1 0 0 1)**
Prerequisites: None; Corequisites: COE 131 and COE 132 and COE 133 and COE 134
This course is a once a week, one-hour seminar to discuss the problems, questions, and successes of the Co-Op Work Experience. It provides an opportunity for teacher/student evaluation of the students work experience and provides guidance for successful completion of the experience.

**COE 211 Co-op Work Experience IV (0 0 10 1)**
Prerequisites: None; Corequisites: None
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 221 Co-op Work Experience V (0 0 10 1)
Prerequisites: None; Corequisites: None
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 231 Co-op Work Experience VI (0 0 10 1)
Prerequisites: None; Corequisites: None
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 235 Work Exp Seminar VI (I 0 0 1)
Prerequisites: None; Corequisites: COE 231 and COE 232 and COE 233 and COE 234
This course is a once a week, one-hour seminar to discuss the problems, questions, and successes of the Co-Op Work Experience. It provides an opportunity for teacher/student evaluation of the students work experience and provides guidance for successful completion of the experience.

COM - COMMUNICATION

COM 110 Introduction to Communication (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

COM 120 Intro Interpersonal Com (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute). This course is also available through the Virtual Learning Community (VLC).

COM 231 Public Speaking (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute).

COM 232 Election Rhetoric (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides an overview of communication styles and topics characteristic of election campaigns. Topics include election speeches, techniques used in election campaigns, and election speech topics. Upon completion, students should be able to identify and analyze techniques and styles typically used in election campaigns. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

COM 251 Debate I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the principles of debate. Emphasis is placed on argument, refutation, research, and logic. Upon completion, students should be able to use research skills and logic in the presentation of ideas within the context of formal debate. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

COM 252 Debate II (3 0 0 3)
Prerequisites: COM 251; Corequisites: None
This course continues the study of debate begun in COM 251. Emphasis is placed on argument, refutation, research, and logic. Upon completion, students should be able to demonstrate proficiency in research skills, logic, and presentation of ideas within the context of formal debate. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
COS - COSMETOLOGY

COS 111 Cosmetology Concepts I (4 0 0 4)
Prerequisites: None; Corequisites: 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 (0 24 0 8)
Prerequisites: None; Corequisites: 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 0 4)
Prerequisites: Instructor Approval Required; 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.

COS 114 Salon II (0 24 0 8)
Prerequisites: Instructor Approval Required; 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 0 4)
Prerequisites: Instructor Approval Required; 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 0 4)
Prerequisites: Instructor Approval Required; Corequisites: 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 117 Cosmetology Concepts IV (2 0 0 2)
Prerequisites: Instructor Approval Required; Corequisites: COS 118
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 118 Salon IV (0 21 0 7)
Prerequisites: Instructor Approval Required; Corequisites: 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 119 Esthetics Concepts I (2 0 0 2)
Prerequisites: None; Corequisites: COS 120
This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

COS 120 Esthetics Salon I (0 18 0 6)
Prerequisites: None; Corequisites: COS 119
This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, makeup applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

COS 125 Esthetics Concepts II (2 0 0 2)
Prerequisites: COS 119; Corequisites: COS 126
This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

COS 126 Esthetics Salon II (0 18 0 6)
Prerequisites: COS 120; Corequisites: COS 125
This course provides experience in a simulated esthetics set-
COS 271 Instructor Concepts I (5 0 0 5)
Prerequisites: None; Corequisites: COS 272
This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

COS 272 Instructor Practicum I (0 0 21 7)
Prerequisites: Instructor Approval Required; Corequisites: COS 271
This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

COS 273 Instructor Concepts II (5 0 0 5)
Prerequisites: COS 271 and COS 272. Instructor Approval Required; Corequisites: COS 274
This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

COS 274 Instructor Practicum II (0 0 21 7)
Prerequisites: COS 271 and COS 272. Instructor Approval Required; Corequisites: COS 273
This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. This is a certificate-level course.

COS - COMPUTER SCIENCE

CSC 134 C++ Programming (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

CSC 136 Fortran Programming (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces computer programming using the Fortran programming language with structured programming principles. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

CSC 139 Visual BASIC Programming (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs.

CSC 143 Object-Oriented Programming (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces the concepts of object-oriented programming. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented 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.

CSC 148 JAVA Programming (2 3 0 3)
CSC 148 has been revised to CSC 151 (JAVA Programming).
See CSC 151 for course information.
Prerequisites: None; Corequisites: None
This course introduces computer programming using the JAVA language. Topics include selection, iteration, arithmetic and logical operators, classes, inheritance, methods, arrays, user interfaces, basic applet creation and other related topics.
Upon completion, students should be able to design, code, test, and debug JAVA language programs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

CSC 151 JAVA Programming (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and document JAVA language programs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

CSC 239 Advanced Visual BASIC (2 3 0 3)
Prerequisites: CSC 139; Corequisites: None
This course is a continuation of CSC 139 using Visual 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.

CSC 251 Adv JAVA Programming (2 3 0 3)
Prerequisites: CSC 151; Corequisites: None
This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

CSC 289 Programming Capstone Proj (1 4 0 3)
Prerequisites: CTS 285; Corequisites: None
This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation.

CTS - COMPUTER INFORMATION TECHNOLOGY

CTS 120 Hardware/Software Support (2 3 0 3)
Prerequisites: CIS 110 or CIS 111; Corequisites: None
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

CTS 285 Systems Analysis & Design (3 0 0 3)
Prerequisites: CIS 115; Corequisites: None
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CVS - CARDIOVASCULAR SONOGRAPHY

Program enrollment required to take CVS courses.

CVS 160 CVS Clinical Ed I (0 0 15 5)
Prerequisites: None; Corequisites: CVS 163
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 161 CVS Clinical Ed II (0 0 24 8)
Prerequisites: CVS 160; Corequisites: None
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 162 CVS Clinical Ed III (0 0 15 5)
Prerequisites: CVS 161; Corequisites: None
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 163 Echo I (3 2 0 4)
Prerequisites: None; Corequisites: None
This course covers cardiac anatomy and introduces cardiac scanning techniques. Topics include normal cardiac anatomy, Doppler physics, and 2-D and M-mode imaging. Upon
completion, students should be able to perform 2-D and M-mode studies.

**CVS 164 Echo II (3 2 0 4)**
Prerequisites: CVS 163; Corequisites: None
This course is a continuation of CVS 163 with continued study of 2-D and M-mode imaging. Emphasis is placed on continuous wave, pulsed wave, color, and power Doppler imaging of normal and abnormal cardiac conditions. Upon completion, students should be able to perform and recognize normal and abnormal cardiac studies.

**CVS 260 CVS Clinical Ed IV (0 0 24 8)**
Prerequisites: CVS 162; Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

**CVS 261 CVS Clinical Ed V (0 0 24 8)**
Prerequisites: CVS 260; Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

**CVS 277 Cardiovascular Topics (2 0 0 2)**
Prerequisites: CVS 163; Corequisites: None
This course provides an overview of cardiovascular topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to sit for the registry examinations.

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**DBA - DATABASE MANAGEMENT TECHNOLOGY**

**DBA 110 Database Concepts (2 3 0 3)**
Prerequisites: None; Corequisites: None
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

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**DFT - DRAFTING**

**DFT 111 Technical Drafting I (1 3 0 2)**
Prerequisites: None; Corequisites: None
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 drafting principles and practices.

**DFT 119 Basic CAD (1 2 0 2)**
Prerequisites: None; Corequisites: 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 151 CAD I (2 3 0 3)**
Prerequisites: None; 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 170 Engineering Graphics (2 2 0 3)**
Prerequisites: None; Corequisites: None
This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

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**DRA - DRAMA/THEATRE**

**DRA 111 Theatre Appreciation (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience’s appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**DRA 112 Literature of the Theatre (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course provides a survey of dramatic works from the clas-
This course introduces economic analysis of individual business, and industry 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. This course is also available through the Virtual Learning Community (VLC).

EDU 119 Intro to Early Childhood Educ (4 0 0 4)
Prerequisites: None; Corequisites: None
This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for all children. Topics include historical foundations, program types, career options, professionalism and creating inclusive environments and curriculum responsive to the needs of all children and families. Upon completion, students should be able to design career plans and develop schedules, environments and activity plans appropriate for all children. This course is also available through the Virtual Learning Community (VLC).

EDU 131 Child, Family, & Commun (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and
identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships between families, educators, and professionals that enhance development and educational experiences of all children. This course is also available through the Virtual Learning Community (VLC).

EDU 144 Child Development I (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. This course is also available through the Virtual Learning Community (VLC).

EDU 145 Child Development II (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. This course is also available through the Virtual Learning Community (VLC).

EDU 146 Child Guidance (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self control and the role of communication and guidance. Upon completion, students should be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors. This course is also available through the Virtual Learning Community (VLC).

EDU 147 (*222) Learn w/ Behav Disord (3 0 0 3)
(*EDU 222 replaces EDU 147)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245); Corequisites: None
This course provides a comprehensive study of learners with behavioral disorders encompassing characteristics, assessments, placement alternatives, inclusion and family interventions. Topics include legislation, appropriate management interventions, and placement options for children with behavioral disorders. Upon completion, students should be able to identify, develop, and utilize positive behavior support systems.

EDU 148 (*223) Specific Learning Disab (3 0 0 3)
(*EDU 223 replaces EDU 148)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245); Corequisites: None
This course provides a comprehensive study of characteristics, alternative assessments, teaching strategies, placement options, inclusion, and family intervention for children with specific learning disabilities. Topics include causes, assessment instruments, learning strategies, and collaborative/inclusion methods for children with specific learning disabilities. Upon completion, students should be able to assist in identifying, assessing, and providing educational interventions for children with specific learning disabilities and their families.

EDU 151 Creative Activities (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments. This course is also available through the Virtual Learning Community (VLC).

EDU 153 Health, Safety & Nutrit (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085; Corequisites: None
This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations. This course is also available through the Virtual Learning Community (VLC).
EDU 154 Social/Emotion/Behav Dev (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245);
Corequisites: None
This course covers the emotional/social development of children and the causes, expressions, prevention and management of challenging behaviors in all children. Emphasis is placed on caregiver/family/child relationships, positive emotional/social environments, developmental concerns, risk factors, and intervention strategies. Upon completion, students should be able to identify factors influencing emotional/social development, utilizing screening measures, and designing positive behavioral supports.

EDU 157 Active Play (2 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course introduces the use of indoor and outdoor physical activities to promote the physical, cognitive, and social/emotional development of children. Topics include the role of active play, development of play skills, playground design, selection of safe equipment, and materials and surfacing for active play. Upon completion, students should be able to discuss the stages of play, the role of teachers in play, and the design of appropriate active play areas and activities.

EDU 161 Intro to Exceptional Chil (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course covers children with exceptionalities as life long learners within the context of the community, school and family. Emphasis is placed on inclusion, legal, social/political, environmental, and cultural issues relating to the teaching of children with exceptionalities. Upon completion, students should be able to demonstrate knowledge of identification processes, inclusive techniques, and professional practices and attitudes.

EDU 162 Observ & Assess in ECE (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course introduces the research, benefits, goals, and ethical considerations associated with observation and assessment in Early Childhood environments. Emphasis is placed on the implementation of multiple observation/assessment strategies including anecdotal records, event samples, rating scales, and portfolios to create appropriate learning experiences. Upon completion, students should be able to practice responsible assessment and use assessments to enhance programming and collaboration for children and families.

EDU 163 Classroom Mgt & Instruct (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course covers management and instructional techniques with school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and instructional strategies that enhance the teaching/learning process and promote students’ academic success.

EDU 173 Becoming a Prof’l in ECE (3 0 0 3)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course is an introduction to the early childhood profession. Emphasis is placed on the NAEYC Ethical Code, professional growth through involvement in professional organizations, and development of a professional portfolio. Upon completion, students should be able to identify professional resources and community partners in order to involve oneself in the early childhood field.

EDU 184 Early Child Intro Pract (1 3 0 2)
Prerequisites: (ENG 080 and RED 080) or ENG 085 and EDU 119; Corequisites: None
This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU 186 (*281) Instruc Strat/Read & Writ (2 0 0 3)
(*EDU 281 replaces EDU 186)
Prerequisites: (ENG 090 and RED 090) or ENG 095;
Corequisites: None
This course covers concepts, resources, and methods for teaching reading and writing to elementary through middle grade children. Topics include the importance of literacy, learning styles, skills assessment, various reading and writing approaches and instructional strategies. Upon completion, students should be able to assess, plan, implement and evaluate school-age literacy experiences as related to the North Carolina Standard Course of Study. This course is also available through the Virtual Learning Community (VLC).

EDU 188 Issues in Early Child Ed (2 0 0 2)
Prerequisites: (ENG 080 and RED 080) or ENG 085;
Corequisites: None
This course covers topics and issues in early childhood education. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to
list, discuss, and explain current topics and issues in early childhood education.

EDU 214 Early Child Intern Pract (1 9 0 4)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 119, EDU 144, EDU 146; Corequisites: None
This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting with the implementation of developmentally appropriate activities and environments for all children; modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU 216 Foundations of Education (4 0 0 4)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, and experiences in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement at select institutions only. This course is also available through the Virtual Learning Community (VLC).

EDU 220 Prog Poli in Early Interv (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 144 or EDU 234 or PSY 244; Corequisites: None
This course covers program policies, issues, legislation, and service delivery models included in early intervention. Emphasis is placed on trends and policies in early intervention relating to programs for infants and young children with disabilities, family roles, and research outcomes. Upon completion, students should be able to identify roles and responsibilities, describe the referral and placement options and explain the different service delivery models.

EDU 221 Children with Exceptional (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245); Corequisites: None
This course introduces children with exceptionalities, their families, support services, inclusive/diverse settings, and educational/family plans based on the foundations of child development. Emphasis is placed on the characteristics of exceptionalities, observation and assessment of children, strategies for adapting the learning environment, and identification of community resources. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement at select institutions only. This course is also available through the Virtual Learning Community (VLC).

EDU 234 Infants, Toddlers, & Twos (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 119; Corequisites: None
This course covers the unique needs and rapid changes that occur in the first three years of life and the inter-related factors that influence development. Emphasis is placed on recognizing and supporting developmental milestones through purposeful strategies, responsive care routines and identifying elements of quality, inclusive early care and education. Upon completion, students should be able to demonstrate respectful relationships that provide a foundation for healthy infant/toddler/twos development, plan/select activities/materials, and partner with diverse families.

EDU 235 School-Age Dev & Program (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for all children ages five to twelve and plan and implement developmentally-appropriate activities.

EDU 241 Adult-Child Relations (2 0 0 2)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers self-concept and effective and active listening skills in positive one-to-one interactions with individuals and groups of children. Emphasis is placed on self-concept development and effective communication techniques used with children. Upon completion, students should be able to identify principles underlying self-concept and demonstrate effective listening and communication skills used by adults with children.

EDU 247 Sensory & Physical Disab (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245); Corequisites: None
This course covers characteristics, intervention strategies, assistive technologies, and inclusive practices for children with sensory and physical disabilities. Topics include inclusive placement options, utilization of support services, other health impairments and family involvement for children with sensory and physical disabilities. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement at select institutions only. This course is also available through the Virtual Learning Community (VLC).
able to identify and utilize intervention strategies and service delivery options for those specific disabilities.

**EDU 248 Developmental Delays (3 0 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095 and (EDU 144 and EDU 145) or (PSY 244 and PSY 245); Corequisites: None
This course covers the causes and assessment of developmental delays and individualized instruction and curriculum for children with developmental delays. Emphasis is placed on definition, characteristics, assessment, educational strategies, inclusion, family involvement, and services for children with developmental delays. Upon completion, students should be able to identify, assess, and plan educational intervention strategies for children with developmental delays and their families.

**EDU 250 PRAXIS I Preparation (1 0 0 1)**
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course is designed to prepare potential teachers for the PRAXIS I exam that is necessary to enter the field of education. Emphasis is placed on content specifications of the PRAXIS I exam, study skills and simulated examinations. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of the PRAXIS I exam.

**EDU 251 Exploration Activities (3 0 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

**EDU 256 Inst Strat/Social Studies (2 2 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers objectives, content, materials, and instructional approaches to social studies. Topics include the integration of history, geography, economics, and government materials; research/study techniques; and critical thinking. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate experiences as it relates to the NC Standard Course of Study.

**EDU 257 Inst Strat/Math (2 2 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095 and MAT 060; Corequisites: None
This course covers concepts, activities, methods, and materials for teaching mathematics in elementary through middle school grades. Topics include individual instruction, developmental skill building, manipulatives, problem solving, critical thinking and numerical concepts. Upon completion, students should be able to assess, plan, implement and evaluate developmentally appropriate math experiences relating to the NC Standard Course of Study.

**EDU 258 Inst Strategies/Science (2 2 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers objectives, content, materials, and instructional approaches to natural sciences for elementary through middle grades. Topics include classroom and laboratory science experiences, research/study techniques, and critical thinking. Upon completion, students should be able to assess/plan/implement/evaluate developmentally appropriate learning experiences in science as related to the North Carolina Standard Course of Study.

**EDU 259 Curriculum Planning (3 0 0 3)**
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 119; Corequisites: None
This course is designed to focus on curriculum planning for three to five year olds. Topics include philosophy, curriculum models, indoor and outdoor environments, scheduling, authentic assessment, and planning developmentally appropriate experiences. Upon completion, students should be able to evaluate children’s development, critique curriculum, plan for individual and group needs, and assess and create quality environments.

**EDU 261 Early Childhood Admin I (3 0 0 3)**
Prerequisites: (ENG 090 & RED 090) or ENG 095; Corequisites: EDU 119
This course introduces principles of basic programming and staffing, budgeting/financial management and marketing, and rules and regulations of diverse early childhood programs. Topics include program structure and philosophy, standards of NC child care programs, finance, funding resources, and staff and organizational management. Upon completion, students should be able to develop components of program/personnel handbooks, a program budget, and demonstrate knowledge of fundamental marketing strategies and NC standards. This course is also available through the Virtual Learning Community (VLC).

**EDU 262 Early Childhood Admin II (3 0 0 3)**
Prerequisites: (ENG 090 & RED 090) or ENG 095 and EDU 261; Corequisites: EDU 119
This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and
evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs. This course is also available through the Virtual Learning Community (VLC).

EDU 263 School-Age Program Admin (2 0 0 2)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course introduces the methods and procedures for development and administration of school-age programs in the public or proprietary setting. Emphasis is placed on the construction and organization of the physical environment. Upon completion, students should be able to plan, develop and administer a quality school-age program.

EDU 271 Educational Technology (2 2 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, use a variety of technology resources and demonstrate appropriate technology skills in educational environments. This course is also available through the Virtual Learning Community (VLC).

EDU 275 Effective Teach Train (2 0 0 2)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students’ time-on-task.

EDU 280 Language & Literacy Exp (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course is designed to expand students’ understanding of children’s language and literacy development and provides strategies for enhancing language/literacy experiences in an enriched environment. Topics include selection of diverse literature and interactive media, the integration of literacy concepts throughout the curriculum, appropriate observations/assessments and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate and diverse language/literacy experiences. This course is also available through the Virtual Learning Community (VLC).

EDU 282 Early Childhood Lit (3 0 0 3)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children’s literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

EDU 284 Early Child Capstone Prac (1 9 0 4)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 119, EDU 144, EDU 145, EDU 146, EDU 151; Corequisites: None
This course is designed to allow students to apply skills in a three star (minimum) or NAEC/ACD accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU 285 Internship Exp-School Age (1 9 0 4)
Prerequisites: (ENG 090 and RED 090) or ENG 095 and EDU 119, EDU 144, EDU 145, EDU 146, and EDU 163; Corequisites: None
This course is designed to allow students to apply skills in a quality public or private school environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques, ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU 288 Adv Issues/Early Child Ed (2 0 0 2)
Prerequisites: (ENG 090 and RED 090) or ENG 095; Corequisites: None
This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.
EDU 289 Adv Issues/School Age (2 0 0 2)
Prerequisites: (ENG 090 and RED 090) or ENG 095;
Corequisites: None
This course covers advanced topics and issues that relate to school-age programs. Emphasis is placed on current advocacy issues, emerging technology, professional growth, ethics, and organizations for providers/teachers working with school-age populations. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues surrounding school-aged populations.

EGR - ENGINEERING

EGR 150 Intro to Engineering (1 2 0 2)
Prerequisites: None; Corequisites: None
This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 210 Intro to Elec/Com Eng Lab (1 3 0 2)
Prerequisites: MAT 271 and PHY 251; Corequisites: None
This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 211 Intro to Computer Org (3 0 0 3)
Prerequisites: MAT 271, PHY 251 and CSC 134;
Corequisites: None
This course provides an introduction to key concepts in computer organization. Topics include number representations, switching circuits, logic design, microprocessor design, assembly programming, interrupts and traps, structured program development and the C programming language. Upon completion, students should be able to represent numbers in various systems; to explain the functions of a microprocessor; and to design logic systems and circuits. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 212 Logic System Design I (3 0 0 3)
Prerequisites: MAT 271 and PHY 251; Corequisites: None
This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 213 Electric Circuits (3 3 0 4)
Prerequisites: MAT 271, PHY 251 and EGR 210;
Corequisites: None
This course provides an introduction to theory, analysis and design of electric circuits. Topics include voltage, current, power, resistance, capacitance, inductance, Kirchoff’s laws, nodal and mesh analysis, Thevenin’s theorem, Norton’s theorem, steady state and transient analysis, and operational amplifiers. Upon completion, students should be able to explain voltage, current, and power; to analyze electric circuits; and to design circuits using operational amplifiers. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 220 Engineering Statics (3 0 0 3)
Prerequisites: PHY 251; Corequisites: MAT 272
This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 225 Engineering Dynamics (3 0 0 3)
Prerequisites: EGR 220; Corequisites: MAT 273
This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 228 Intro to Solid Mechanics (3 0 0 3)
Prerequisites: EGR 220; Corequisites: None
This course provides an introduction to engineering theory
of deformable solids and applications. Topics include stress and deformation resulting from axial, torsion, and bending loads; shear and moment diagrams; Mohr’s circle of stress; and strain and buckling of columns. Upon completion, students should be able to analyze solids subject to various forces and design systems using a variety of materials. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

EGR 230 Engineering Materials (3 0 0 3)
Prerequisites: CHM 151; Corequisites: None
This course provides an introduction to fundamental physical principals governing the structure and constitution of metallic and nonmetallic materials. Topics include the relationships among the fundamental physical principles and the mechanical, physical and chemical properties of engineering materials. Upon completion, students should be able to explain the fundamental physical properties important to the design and understanding of engineering materials. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

ELC - ELECTRICITY

ELC 112 DC/AC Electricity (3 6 0 5)
Prerequisites: None; 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, troubleshoot, and repair DC/AC circuits.

ELC 117 Motors and Controls (2 6 0 4)
Prerequisites: None; 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.

ELC 128 Intro to PLC (2 3 0 3)
Prerequisites: None; 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. This course is also available through the Virtual Learning Community (VLC).

ELC 228 PLC Applications (2 6 0 4)
Prerequisites: None; Corequisites: None
This course covers programming and applications of programmable logic controllers. Emphasis is placed on programming techniques, networking, specialty I/O modules, and system troubleshooting. Upon completion, students should be able to specify, implement, and maintain complex PLC controlled systems.

ELN - ELECTRONICS

ELN 112 Diesel Electronics System (2 6 0 4)
Prerequisites: None; Corequisites: None
This course introduces electronic theory and applications as used in medium and heavy-duty vehicles. Emphasis is placed on the basic function and operation of semiconductor and integrated circuits. Upon completion, students should be able to identify electronic components, explain their use and function, and use meters and flow charts to diagnose and repair systems.

ELN 113 Electronic Fuel Injection (1 2 0 2)
Prerequisites: None; Corequisites: None
This course covers the function of the various sensors used to provide feedback control to current model diesel engines. Emphasis is placed on the operation of ECM-controlled fuel injectors and testing using current industry methods. Upon completion, students should be able to obtain information from the electronic fuel system using current test programs, fault tree, and digital meters.

ELN 229 Industrial Electronics (3 3 0 4)
Prerequisites: None; Corequisites: None
This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. 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 0 3)
Prerequisites: None; Corequisites: None
This course introduces the fundamental concepts of 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 schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery.
ENG - ENGLISH

ENG 070 Basic Language Skills (2 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the fundamentals of standard written English. Emphasis is placed on effective word choice, recognition of sentences and sentence parts, and basic usage. Upon completion, students should be able to generate sentences that clearly express ideas. This course does not satisfy the developmental reading and writing prerequisite for ENG 111 or ENG 111A.

ENG 080 Writing Foundations (3 2 0 4)
Prerequisites: ENG 070 or ENG 075; Corequisites: 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 or ENG 111A.

ENG 090 Composition Strategies (3 0 0 3)
Prerequisites: ENG 080 or ENG 085; Corequisites: 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 reading requirement for ENG 111 and ENG 111A.

ENG 090A Comp Strategies Lab (0 2 0 1)
Prerequisites: ENG 080 or ENG 085; Corequisites: ENG 090
This writing lab is designed to practice the skills introduced in ENG 090. 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.

ENG 101 Applied Communications I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

ENG 102 Applied Communications II (3 0 0 3)
Prerequisites: None; Corequisites: 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.

ENG 111 Expository Writing (3 0 0 3)
Prerequisites: ENG 090 and RED 090 or ENG 095; Corequisites: 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 0 3)
Prerequisites: ENG 111; Corequisites: None
This course is 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. This course is also available through the Virtual Learning Community (VLC).

ENG 113 Literature-Based Research (3 0 0 3)
Prerequisites: ENG 111; Corequisites: None
This course is 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 0 3)
Prerequisites: ENG 111; Corequisites: None
This course is 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 individu-
...ally 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 131 Introduction to Literature (3 0 0 3)**
Prerequisites: ENG 111; Corequisites: ENG 112 or 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 132 Introduction to Drama (3 0 0 3)**
Prerequisites: ENG 111; Corequisites: ENG 112 and ENG 113 and ENG 114
This course provides intensive study of drama as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of drama. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of drama. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ENG 233 Major American Writers (3 0 0 3)**
Prerequisites: ENG 112 or ENG 113 or ENG 114;
Corequisites: 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 243 Major British Writers (3 0 0 3)**
Prerequisites: ENG 112 or ENG 113 or ENG 114;
Corequisites: None
This course provides an intensive study of the works of several major British authors. Emphasis is placed on British 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 272 Southern Literature (3 0 0 3)**
Prerequisites: ENG 112 or ENG 113 or ENG 114;
Corequisites: None
This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ENG 274 Literature by Women (3 0 0 3)**
Prerequisites: ENG 112 or ENG 113 or ENG 114;
Corequisites: None
This course provides an analytical study of the works of several women authors. Emphasis is placed on the historical and cultural contexts, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**ENG 275 Science Fiction (3 0 0 3)**
Prerequisites: ENG 112, ENG 113, or ENG 114;
Corequisites: None
This course covers the relationships between science and literature through analysis of short stories and novels. Emphasis is placed on scientific discoveries that shaped Western culture and our changing view of the universe as reflected in science fiction literature. Upon completion, students should be able to trace major themes and ideas and illustrate relationships between science, worldview, and science fiction literature. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**GEL - GEOLOGY**

**GEL 111 Introductory Geology (3 2 0 4)**
Prerequisites: None; Corequisites: None
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**GEO - GEOGRAPHY**

**GEO 110 Introduction to Geography (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course introduces map reading skills and the physical and cultural features of different areas of the earth. Topics include spatial association, the importance of location, physical characteristics of the earth, and the impact of humans on the environment. Upon completion, students should be able
to demonstrate an ability to read a map and describe physical and cultural features of different regions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

GEO 111 World Regional Geography  (3 0 0 3)
Prerequisites: None; Corequisites: 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 130 General Physical Geography  (3 0 0 3)
Prerequisites: None; Corequisites: 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.

GRD - GRAPHIC DESIGN

GRD 110 Typography I  (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

GRD 131 Illustration I  (1 3 0 2)
Prerequisites: ART 131 or DES 125 or GRD 121; Corequisites: None
This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

GRD 132 Illustration II  (1 3 0 2)
Prerequisites: GRD 131; Corequisites: None
This course is a continuation of GRD 131. Topics include editorial, product, fashion, and advertising illustrations. Upon completion, students should be able to demonstrate increased proficiency in creating quality illustrations from conceptualization through finished artwork.

GRD 133 Illustration III  (1 3 0 2)
Prerequisites: GRD 132; Corequisites: None
This course is designed to strengthen visual techniques and conceptual approaches to illustration. Emphasis is placed on advanced rendering techniques, requirements, and limitations. Upon completion, students should be able to create comprehensive illustrations that meet client/printer requirements.

GRD 141 Graphic Design I  (2 4 0 4)
Prerequisites: None; Corequisites: None
This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

GRD 142 Graphic Design II  (2 4 0 4)
Prerequisites: DES 135 or GRD 141 or ART 121; Corequisites: None
This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

GRD 151 Computer Design Basics  (1 4 0 3)
Prerequisites: None; Corequisites: None
This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

GRD 152 Computer Design Tech I  (1 4 0 3)
Prerequisites: GRD 151; Corequisites: None
This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.
GRD 153 Computer Design Tech II (1 4 0 3)
Prerequisites: GRD 152; Corequisites: None
This course covers advanced theories and practices in the field of computer design. Emphasis is placed on advanced use of color palettes, layers, and paths. Upon completion, students should be able to creatively produce designs and articulate their rationale.

GRD 160 Photo Fundamentals I (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces basic camera operations, roll film processing, and photographic print production. Topics include contrast, depth-of-field, subject composition, enlarger operation, and density control. Upon completion, students should be able to produce photographic prints with acceptable density values and quality.

GRD 161 Photo Fundamentals II (1 4 0 3)
Prerequisites: GRD 160; Corequisites: None
This course is a continuation of GRD 160. Topics include conversions, toning, color, specialized equipment, lighting, processing, and other methods and materials. Upon completion, students should be able to demonstrate proficiency in producing photographic prints.

GRD 162 Photography Portfolio (1 4 0 3)
Prerequisites: GRD 161; Corequisites: None
This course provides an opportunity to develop a portfolio through research and review of previous photographic works. Topics include visual communication skills and presentation of works. Upon completion, students should be able to prepare and present a portfolio of their photographic works.

GRD 175 3-D Animation Design (1 4 0 3)
Prerequisites: GRD 151 or GRA 151; Corequisites: None
This course explores three-dimensional animation design and production. Emphasis is placed on developing essential skills and techniques using three-dimensional animation software from conceptualization to completion including design, illustration, color, spatial depth, and movement. Upon completion, students should be able to produce animation sequences for computer-related presentations.

GRD 180 Interactive Design (1 4 0 3)
Prerequisites: GRD 151 or GRA 151; Corequisites: None
This course covers skills and techniques used in designing interactive presentations. Emphasis is placed on design, including interface design, color, illustration, scripting, audio, typography, and animated elements. Upon completion, students should be able to design and produce interactive presentations.

GRD 210 Airbrush I (1 2 0 2)
Prerequisites: None; Corequisites: None
This course covers the mechanics of airbrushing. Topics include care and maintenance of equipment, spraying techniques and surfaces, and selection of materials. Upon completion, students should be able to produce work demonstrating competent use of an airbrush.

GRD 211 Airbrush II (1 2 0 2)
Prerequisites: GRD 210; Corequisites: None
This course is a continuation of GRD 210. Emphasis is placed on advanced uses of an airbrush and spraying techniques. Upon completion, students should be able to demonstrate advanced techniques in airbrushing.

GRD 220 Calligraphy (0 2 0 1)
Prerequisites: None; Corequisites: None
This course covers calligraphy as a design element. Emphasis is placed on the history, methods, materials, tools, and techniques of hand lettering. Upon completion, students should be able to use a variety of pens, brushes, inks, paint, and surfaces to produce several finished calligraphic works.

GRD 230 Technical Illustration (1 3 0 2)
Prerequisites: ART 131 or DES 125 or GRD 121; Corequisites: None
This course introduces technical and industrial illustration techniques. Topics include orthographic, isometric, linear perspective, and exploded views. Upon completion, students should be able to demonstrate competence in various technical rendering techniques.

GRD 231 Marker Illustration (1 3 0 2)
Prerequisites: ART 131 or DES 125 or GRD 121; Corequisites: None
This course covers marker illustration. Emphasis is placed on various marker types, techniques, and surfaces used in marker illustration. Upon completion, students should be able to demonstrate competence in the use of markers as a medium for commercial illustration.

GRD 232 Fashion Illustration (1 3 0 2)
Prerequisites: GRD 131; Corequisites: None
This course is a study of the current fashion figure. Emphasis is placed on form and movement combined with colors, patterns, fabrics, textures, and styles to create exciting illustrations. Upon completion, students should be able to illustrate fashion figures and accessories using various media.

GRD 233 Product Illustration (1 3 0 2)
Prerequisites: GRD 131 or GRD 230 and GRD 152 or GRA 152; Corequisites: None
This course covers the rendering and illustration of products
GRD 241 Graphic Design III (2 4 0 4)
Prerequisites: DES 136 or GRD 142; Corequisites: None
This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

GRD 242 Graphic Design IV (2 4 0 4)
Prerequisites: GRD 241; Corequisites: None
This course is a continuation of GRD 241. Emphasis is placed on using advanced media techniques, concepts, strategies, and professionalism in all aspects of design. Upon completion, students should be able to conceptualize, create, and produce designs for reproduction.

GRD 263 Illustrative Imaging (1 4 0 3)
Prerequisites: GRD 151 or GRA 151; Corequisites: None
This course covers the creative manipulation of images utilizing digital techniques of masking, layering, airbrushing, and painting. Topics include the aesthetic analysis of visual imagery as well as the legalities of manipulating images. Upon completion, students should be able to utilize software applications to creatively manipulate and illustratively build digital images which accomplish design objectives.

GRD 271 Multimedia Design I (1 3 0 2)
Prerequisites: GRD 151 or GRA 151; Corequisites: None
This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audiovideo, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

GRD 272 Multimedia Design II (1 3 0 2)
Prerequisites: GRD 271; Corequisites: None
This course is a continuation of GRD 271. Emphasis is placed on advanced animation, specialized software, quality control, and cross-platform delivery, as well as problems associated with delivery media and interactivity. Upon completion, students should be able to produce multimedia presentations and determine and adapt to technical specifications for delivery.

GRD 275 Animation I (1 3 0 2)
Prerequisites: GRD 151 or GRA 151; Corequisites: None
This course introduces the concepts and development of animation. Emphasis is placed on theory, storyboarding, narration, sequence implementation, appropriate software usage, and audiovisual manipulation. Upon completion, students should be able to successfully complete computer-generated animated sequences.

GRD 280 Portfolio Design (2 4 0 4)
Prerequisites: GRD 142 and GRD 152 or GRA 152; Corequisites: None
This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

GRD 281 Design of Advertising (2 0 0 2)
Prerequisites: None; Corequisites: None
This course explores the origins, roles, scope, forms, and development of advertising. Emphasis is placed on advertising development from idea through production and the inter-relationship of marketing to types of advertising, media, and organizational structure. Upon completion, students should be able to demonstrate an understanding of the complexities and relationships involved in advertising design.

GRD 282 Advertising Copywriting (1 2 0 2)
Prerequisites: ENG 111; Corequisites: None
This course covers copywriting for print, electronic, and broadcast advertising and promotion. Topics include advertising strategies, proposals, headlines, slogans, and text copy for various types of advertising. Upon completion, students should be able to write and articulate advertising proposals and understand the ethical and regulatory environment for advertising.

GRD 285 Client/Media Relations (1 2 0 2)
Prerequisites: GRD 142 and GRA 121 or GRA 152 or GRD 152; Corequisites: None
This course introduces media pricing, scheduling, and business ethics. Emphasis is placed on communication with clients and determination of clients’ advertising needs. Upon completion, students should be able to use professional communication skills to effectively orchestrate client/media relationships.

HEA - HEALTH

HEA 110 Personal Health/Wellness (3 0 0 3)
Prerequisites: None; 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
This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**HEA 112 First Aid & CPR**  (1 2 0 2)

**Prerequisites:** None; **Corequisites:** None

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**HET - HEAVY EQUIPMENT MAINTENANCE**

**HET 110 Diesel Engines**  (3 0 6)

**Prerequisites:** None; **Corequisites:** None

This course introduces theory, design, terminology, and operating adjustments for diesel engines. Emphasis is placed on safety, theory of operation, inspection, measuring, and rebuilding diesel engines according to factory specifications. Upon completion, students should be able to measure, diagnose problems, and repair diesel engines.

**HET 112 Diesel Electrical Systems**  (3 6 0 5)

**Prerequisites:** None; **Corequisites:** None

This course introduces electrical theory and applications as they relate to diesel powered equipment. Topics include lighting, accessories, safety, starting, charging, instrumentation, and gauges. Upon completion, students should be able to follow schematics to identify, repair, and test electrical circuits and components.

**HET 114 Power Trains**  (3 6 0 5)

**Prerequisites:** None; **Corequisites:** None

This course introduces power transmission devices. Topics include function and operation of gears, chains, clutches, planetary gears, drive lines, differentials, and transmissions. Upon completion, students should be able to identify, research specifications, repair, and adjust power train components.

**HET 115 Electronic Engines**  (2 3 0 3)

**Prerequisites:** None; **Corequisites:** None

This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon completion, students should be able to diagnose, test, and calibrate electronically controlled diesel engines.

**HET 116 Air Cond/Diesel Equip**  (1 2 0 2)

**Prerequisites:** None; **Corequisites:** None

This course provides a study of the design, theory, and operation of heating and air conditioning systems in newer models of medium and heavy-duty vehicles. Topics include component function, refrigerant recovery, and environmental regulations. Upon completion, students should be able to use proper techniques and equipment to diagnose and repair heating/air-conditioning systems according to industry standards.

**HET 118 Mechanical Orientation**  (2 0 0 2)

**Prerequisites:** None; **Corequisites:** None

This course introduces the care and safe use of power and hand tools. Topics include micrometers, dial indicators, torque wrenches, drills, taps dies, screw extractors, thread restorers, and fasteners. Upon completion, students should be able to select and properly use tools for various operations.

**HET 119 Mechanical Transmissions**  (2 2 0 3)

**Prerequisites:** None; **Corequisites:** None

This course introduces the operating principles of mechanical medium and heavy-duty truck transmissions. Topics include multiple counter shafts, power take-offs, sliding idler clutches, and friction clutches. Upon completion, students should be able to diagnose, inspect, and repair mechanical transmissions.

**HET 125 Preventive Maintenance**  (1 3 0 2)

**Prerequisites:** None; **Corequisites:** None

This course introduces preventive maintenance practices used on medium and heavy-duty vehicles and rolling assemblies. Topics include preventive maintenance schedules, services, DOT rules and regulations, and road ability. Upon completion, students should be able to set up and follow a preventive maintenance schedule as directed by manufacturers.

**HET 127 Shop Rules & Regulations**  (1 0 0 1)

**Prerequisites:** None; **Corequisites:** None

This course introduces safety, OSHA, and EPA general requirements used in the mobile equipment industry. Topics include fire extinguisher use, MSDS sheets, oil contamination, protective gear, and other related topics. Upon completion, students should be able to properly use fire extinguishers and demonstrate knowledge of applicable general safety, OSHA, and EPA regulations.

**HET 128 Medium/Heavy Duty Tune Up**  (1 2 0 2)

**Prerequisites:** None; **Corequisites:** None

This course introduces tune-up and troubleshooting according to manufacturers' specifications. Topics include troubleshooting engine systems, tune-up procedures, and use and care of special test tools and equipment. Upon completion, students should be able to troubleshoot, diagnose, and repair engines and components using appropriate diagnostic equipment.
HET 134 Mechanical Fuel Injection  \( (2 2 0 3) \)
Prerequisites: None; Corequisites: None
This course introduces the principles of mechanical fuel injection. Emphasis is placed on test equipment, component functions, and theory. Upon completion, students should be able to diagnose, service, and repair fuel systems and governors.

HET 230 Air Brakes  \( (1 2 0 2) \)
Prerequisites: None; Corequisites: None
This course introduces the operation and design of air braking systems used on trucks. Topics include safety, governors, compressors, and supporting systems. Upon completion, students should be able to diagnose, disassemble, inspect, repair, and reassemble air brake systems.

HET 231 Med/Hvy Duty Brake System  \( (1 3 0 2) \)
Prerequisites: None; Corequisites: None
This course covers the theory and repair of braking systems used in medium and heavy-duty vehicles. Topics include air, hydraulic, and ABS system diagnosis and repair. Upon completion, students should be able to troubleshoot, adjust, and repair braking systems on medium and heavy-duty vehicles.

HET 233 Suspension & Steering  \( (2 4 0 4) \)
Prerequisites: None; Corequisites: None
This course introduces the theory and principles of medium and heavy-duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon completion, students should be able to troubleshoot, adjust, and repair suspension and steering components on medium and heavy-duty vehicles.

**HIS - HISTORY**

HIS 111 World Civilizations I  \( (3 0 0 3) \)
Prerequisites: None; Corequisites: None
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in per-modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 112 World Civilizations II  \( (3 0 0 3) \)
Prerequisites: None; Corequisites: None
This course introduces world history from the early modern era to the present. Topics include the cultures of African, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

HIS 121 Western Civilization I  \( (3 0 0 3) \)
Prerequisites: None; 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  \( (3 0 0 3) \)
Prerequisites: None; Corequisites: None
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  \( (3 0 0 3) \)
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  \( (3 0 0 3) \)
Prerequisites: None; 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 151 Hispanic Civilization  \( (3 0 0 3) \)
Prerequisites: None; Corequisites: None
This course surveys the cultural history of Spain and its impact on the New World. Topics include Spanish and Latin Ameri-
can culture, literature, religion, and the arts. Upon completion, students should be able to analyze the cultural history of Spain and Latin America. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement.

**HIS 221 African-American History (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major or elective course requirement.

**HIS 222 African-American History I (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers African American history from the Colonial period to the present. Topics include African origins, the nature of slavery, African-American participation in the American Revolution, abolitionism, and the emergence of a distinct African-American culture. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early African-American history. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**HIS 223 African-American History II (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers African American history from the Civil War to the present. Topics include Reconstruction, the Jim Crow era, urbanization, the Harlem Renaissance, the Civil Rights movement, and the philosophies of major African-American leaders. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in African-American history since the Civil War. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**HIS 228 History of the South (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and its basis in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major or elective course requirement.

**HIS 231 Recent American History (3 0 0 3)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major or elective course requirement.

**HIS 235 The Spanish Borderlands (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course surveys the development of the Spanish Borderlands of the American South and Southwest. Topics include Native American cultures, European contact, and subsequent conflicts. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the Spanish Borderlands. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement.

**HIS 236 North Carolina History (3 0 0 3)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement.

**HIS 260 History of Africa (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course surveys the history of Africa from pre-history to the present. Emphasis is placed on the evolution of social, political, economic, and governmental structures in Africa. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in Africa. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major or elective course requirement.
HOR - HORTICULTURE

HOR 101 Pract Greenhouse Skills (1 9 0 4)
Prerequisites: None; Corequisites: None
This course covers general principles and applications of greenhouse operations. Topics include greenhouse materials, production, sales, and other related topics. Upon completion, students should be able to identify common greenhouse plant materials, demonstrate customer service skills, demonstrate propagation practices, and understand greenhouses and related structures. This is a certificate-level course.

HOR 102 Pract Nursery Skills (1 6 0 3)
Prerequisites: None; Corequisites: None
This course covers general principles and applications of nursery operations. Topics include nursery materials, production, sales, and other related topics. Upon completion, students should be able to identify common nursery materials, demonstrate nursery propagation practices, and understand field and container stock production. This is a certificate-level course.

HOR 103 Pract Landscape Skills (1 9 0 4)
Prerequisites: None; Corequisites: None
This course covers general principles and applications of landscape operations. Topics include landscape materials, design, installation, maintenance, and other related topics. Upon completion, students should be able to identify common landscape plant materials, demonstrate design principles, and understand installation and maintenance techniques, tools, and equipment. This is a certificate-level course.

HOR 104 Pract Grounds Skills (1 6 0 3)
Prerequisites: None; Corequisites: None
This course covers general principles and applications of grounds management operations. Topics include turf management, grounds maintenance techniques, and other related topics. Upon completion, students should be able to identify tools and equipment, demonstrate the safe use of tools and equipment, and understand turfgrass and grounds maintenance principles. This is a certificate-level course.

HOR 107 Controlled Work Exp I (0 10 0 1)
Prerequisites: None; Corequisites: None
This course provides experience in a controlled work environment. Emphasis is placed on integrating classroom learning with related work experience in greenhouse production and sales and landscape winterizing techniques. Upon completion, students should be able to demonstrate employable skills and satisfactorily perform work-related competencies. This is a certificate-level course.(Greenhouse and Grounds Maintenance only).

HOR 108 Controlled Work Exp II (0 10 0 1)
Prerequisites: None; Corequisites: None
This course provides experience in a controlled work environment. Emphasis is placed on integrating classroom learning with related work experience in spring seasonal landscape installation and maintenance and commercial plant production. Upon completion, students should be able to demonstrate employable skills and satisfactorily perform work-related competencies. This is a certificate-level course.(Greenhouse and Grounds Maintenance only).

HOR 109 Controlled Work Exp III (0 10 0 1)
Prerequisites: None; Corequisites: None
This course provides experience in a controlled work environment. Emphasis is placed on integrating classroom learning with related work experience in landscape and grounds maintenance. Upon completion, students should be able to demonstrate employable skills and satisfactorily perform work-related competencies. This is a certificate-level course.(Greenhouse and Grounds Maintenance only).

HOR 112 Landscape Design I (2 3 0 3)
Prerequisites: None; Corequisites: None
This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design.

HOR 114 Landscape Construction (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design.

HOR 118 Equipment Op & Maint (1 3 0 2)
Prerequisites: None; Corequisites: None
This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

HOR 124 Nursery Operations (2 3 0 3)
Prerequisites: None; Corequisites: None
This course covers nursery site and crop selection, cultural practices, and production and marketing methods. Topics include site considerations, water availability, equipment, irrigation, fertilization, containers, media, and pest control. Upon completion, students should be able to design and implement a nursery operation and grow and harvest nursery crops.
HOR 134 Greenhouse Operations (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.

HOR 160 Plant Materials I (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 162 Applied Plant Science (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR 164 Horticulture Pest Management (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators license.

HOR 166 Soils & Fertilizers (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media.

HOR 168 Plant Propagation (2 2 0 3)
Prerequisites: None; Corequisites: None
This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

HOR 213 Landscape Design II (2 2 0 3)
Prerequisites: HOR 112; Corequisites: None
This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design.

HOR 215 Landscape Irrigation (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems.

HOR 255 Interiorscapes (1 2 0 2)
Prerequisites: None; Corequisites: None
This course covers plant selection, design, and management for interior settings. Topics include tropical plant identification, cultural requirements, insect and disease identification and control, and design and management requirements for interior plants. Upon completion, students should be able to design, install, and manage plants in interior settings.

HOR 260 Plant Materials II (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, culture requirements, and landscape uses. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 273 Hor Mgmt & Marketing (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers the steps involved in starting or managing a horticultural business. Topics include financing, regulations, market analysis, employer/employee relations, formulation of business plans, and operational procedures in a horticultural business. Upon completion, students should be able to assume ownership or management of a horticultural business.

HUM - HUMANITIES

HUM 110 Technology and Society (3 0 0 3)
Prerequisites: None; Corequisites: None
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. This course has been approved to satisfy the...
Course Descriptions

**HYD - HYDRAULICS**

**HYD 110 Hydraulics/Pneumatics I (2 3 0 3)**
Prerequisites: None; 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.

**HYD 112 Hydraulics/Med/Heavy Duty (1 2 0 2)**
Prerequisites: None; Corequisites: None
This course introduces hydraulic theory and applications as applied to mobile equipment. Topics include component studies such as pumps, motors, valves, cylinders, filters, reservoirs, lines, and fittings. Upon completion, students should be able to identify, diagnose, test, and repair hydraulic systems using schematics and technical manuals.

**HYD 121 Hydraulics/Pneumatics II (1 3 0 2)**
Prerequisites: HYD 110; Corequisites: None
This course is a continuation of HYD 110 and provides further investigation into fluid power systems. Topics include advanced system components, troubleshooting, and other related topics. Upon completion, students should be able to demonstrate an understanding of the installation, operation, and maintenance of fluid power components and systems.

**ICV - INTERVENTIONAL CARDIAC AND VASCULAR TECHNOLOGY**

Program acceptance required to take ICV courses.

**ICV 110 Patient Care/Fundamentals (2 2 0 3)**
Prerequisites: None; Corequisites: None
This course introduces specialized patient care and management, physiological monitoring, general procedure considerations and underlying fundamentals needed to perform a cardiovascular or vascular procedure. Emphasis is placed on patient preparation and communication, pressure measurements, ECG, specialized cardiac monitoring, intravenous therapy, sterile technique, infection control, legal issues, and isolation procedures. Upon completion, students should understand and demonstrate patient care management, use and function of physiological monitoring devices, and sterile technique in regards to infection control.

**ICV 111 ICV Electrocardiography (0 3 0 1)**
Prerequisites: None; Corequisites: None
This course covers the performance and interpretation of the twelve-lead electrocardiogram. Emphasis is placed on patient set-up, the cardiac cycle, electrical conduction pathway, normal rhythms, common dysrhythmias, Holter monitoring, and electrophysiology studies/ablations. Upon completion, students should be able to describe ECG set-up, interpret normal and abnormal rhythms, and discuss testing modalities for invasive and noninvasive cardiology.

**ICV 120 ICV Clinical Ed I (0 0 6 2)**
Prerequisites: None; Corequisites: None
This course provides the student the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on development of laboratory skills and imaging procedures, image production, patient care and positioning. Upon completion, students should be able to assume a variety of duties and responsibilities in the interventional cardiac/vascular laboratories.

**ICV 130 ICV Clinical Ed III (0 0 12 4)**
Prerequisites: None; Corequisites: None
This course provides the student an opportunity to apply knowledge gained from didactic instruction to the interventional cardiac/vascular clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, image production and angiography within the interventional cardiac/vascular environment. Upon completion, students should be
able to assume a variety of duties and responsibilities in the interventional cardiac/vascular environment.

**ICV 216 ICV Pharmacology (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers the nature and source of drugs, safety, and responsibility, routes of administration, pharmacokinetics, and patient variables that affect medication therapy. Emphasis is placed on classifications, dosages, indications, contraindications, interactions, adverse reactions, critical care and life-threatening situations. Upon completion, students should be able to compute dosages and practice safe usage and administration of therapeutic medications according to protocols of the medical facility.

**ICV 218 Cardiac Physiology & Proc (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers angiographic approaches to diagnostic and interventional procedures performed in a cardiovascular lab. Emphasis is placed on structure, cardiovascular anatomy, hemodynamics of vascular systems, pulmonary circulation, cardiac circulation, filming sequence, patient positioning, and pathology. Upon completion, students should be able to demonstrate knowledge of cardiovascular and supporting systems, visualizing methods, radiographic anatomy, and conduct critical image reviews.

**ICV 219 Vascular Physiology & Proc (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers angiographic approaches to diagnostic and interventional procedures performed in a vascular lab. Emphasis is placed on structure, vascular anatomy, hemodynamics of vascular systems, peripheral circulation, ECG, neuroangiography, renal and portal systems, filming sequence, patient positioning, and pathology. Upon completion, students should be able to demonstrate knowledge of vascular systems, methods used to visualize radiographic anatomy, and conduct critical reviews of obtained images.

**ICV 220 ICV Clinical Ed IV (0 0 27 9)**
Prerequisites: None; Corequisites: None
This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular interventional clinical environment. Emphasis is placed on patient care, radiation safety, recognition of cardiovascular anatomy and pathology, equipment and imaging procedures and production. Upon completion, students should be able to demonstrate selected cardiac procedures, advanced ECG interpretation, preparation of sterile supplies, and maintenance of equipment and supplies.

**ICV 241 ICV Pathology Review (2 0 0 2)**
Prerequisites: None; Corequisites: None
This course is designed to concentrate on complex physiologic and pathologic imaging. Emphasis is placed on evaluation of student case studies performed in the clinical setting. Upon completion, students should be able to identify normal vascular anatomy and recognize various pathologies of the vascular systems.

**INT - INTERNATIONAL BUSINESS**

**INT 110 International Business (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business. This course is also available through the Virtual Learning Community.

**INT 210 International Trade (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course covers international business trade practices and foreign market research. Emphasis is placed on current trends of US trade practices in foreign countries and how to engage in international trade and acquire foreign marketing information. Upon completion, students should be able to formulate an overall product policy for the international marketplace. This course is a unique concentration requirement of the International Business concentration in the Business Administration program.

**INT 220 International Economics (3 0 0 3)**
Prerequisites: ECO 151 or ECO 251 or ECO 252; Corequisites: None
This course introduces the forces and criteria for the development of a new international economic order. Emphasis is placed on balance of payments, foreign exchange rates and their determination, International Monetary System, and arguments for and against free trade and protectionism. Upon completion, students should be able to describe economic principles and concepts of international trade. This course is a unique concentration requirement of the International Business concentration in the Business Administration program.

**INT 230 International Law (3 0 0 3)**
Prerequisites: BUS 115; Corequisites: None
This course is designed to develop an understanding of the different theories on international law and their effect on international trade. Emphasis is placed on concepts of contracts, international transactions, major organizations in international trade, establishment of treaties, economic areas, and US laws affecting international trade. Upon completion, students should be able to apply theories and concepts to international trade and transactions. This course is a unique concentration requirement of the International Business concentration in the Business Administration program.
ISC - INDUSTRIAL SCIENCE

ISC 110 Workplace Safety (1 0 0 1)
Prerequisites: None; Corequisites: 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. This course is also available through the Virtual Learning Community (VLC).

ISC 121 Environmental Health & Safety (3 0 0 3)
Prerequisites: None; 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 131 Quality Management (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides a study and analysis of the aspects and implications of quality management 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.

ISC 221 Statistical Quality Control (3 0 0 3)
Prerequisites: Completion of curriculum mathematics requirement; Corequisites: 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.

LEX - LEGAL EDUCATION

LEX 110 Intro to Paralegal Study (2 0 0 2)
Prerequisites: None; Corequisites: None
This course introduces the paralegal profession and the legal system, and an emphasis is placed on the role of professional and legal ethics. Topics include regulations, ethics, case analysis, legal reasoning, career opportunities, professional organizations, terminology and other related topics. Upon completion, the student should be able to explain the role of a paralegal and identify the skills, knowledge, and ethics required of paralegals. This course is also available through the Virtual Learning Community (VLC).

LEX 120 Legal Research/Writing I (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citations; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

LEX 121 Legal Research/Writing II (2 2 0 3)
Prerequisites: LEX 120; Corequisites: None
This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

LEX 130 Civil Injuries (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non-intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses.

LEX 140 Civil Litigation I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the structure of the legal system and the rules governing civil litigation. Topics include jurisdiction, state and federal rules of civil procedure and evidence. Upon completion, students should be able to act as an attorney in the preparation of pleadings and motions. This course is also available through the Virtual Learning Community (VLC).

LEX 141 Civil Litigation II (2 2 0 3)
Prerequisites: LEX 140; Corequisites: None
This course covers advanced topics in the civil litigation process. Topics include motions, discovery, and trial and appellate procedures. Upon completion, students should be able to assist an attorney in preparing and organizing documents for trial, settlement, and post-trial practice.
LEX 150 Commercial Law (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

LEX 160 Criminal Law & Procedure (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

LEX 210 Real Property I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

LEX 211 Real Property II (1 4 0 3)
Prerequisites: LEX 210; Corequisites: None
This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

LEX 214 Investigat & Trial Prep (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces the fundamentals of investigation. Topics include compiling/assembling data for cases; investigative planning/information gathering techniques; locating/interviewing witnesses; collection/preserving/evaluating sufficiency/admissibility of evidence; preparation of reports; and evidence presentation at depositions/court proceeding. Upon completion, students should be able to plan/use investigative checklists, understand/demonstrate investigative techniques, prepare reports, and enhance verbal and interpersonal communications skills and interviewing techniques.

LEX 240 Family Law (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law.

LEX 250 Wills, Estates, & Trusts (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, interstate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

LEX 270 Law Office Mgt/Technology (1 2 0 2)
Prerequisites: None; Corequisites: None
This course provides an overview of law office management and organization. Topics include office forms, filing systems, billing/time keeping, computer systems, calendar systems, library administration, case management, office/personnel procedures, ethics, and technology. Upon completion, students should be able to establish and maintain various law office systems, monitor case progress, and supervise non-lawyer personnel.

LEX 280 Ethics & Professionalism (2 0 0 2)
Prerequisites: None; Corequisites: None
This course reinforces legal ethics and the role of the paralegal in a professional work environment. Topics include a review of ethics, employment opportunities, and search techniques; paralegal certification; and other related topics. Upon completion, students should be able to understand the paralegal’s role in the ethical practice of law.

LSG - LANDSCAPE GARDENING

LSG 111 Basic Landscape Tech (2 0 0 2)
Prerequisites: None; Corequisites: None
This course introduces basic principles essential to landscape gardening. Topics include soils, propagation, watering, fertilizing, pruning, pest control, and planting. Upon completion, students should be able to perform basic gardening techniques essential to maintaining a landscape.

LSG 121 Fall Gardening Lab (0 6 0 2)
Prerequisites: None; Corequisites: None
This course provides hands-on experience in fall gardening techniques. Emphasis is placed on pruning, irrigation, planting,
fertilizing, pest control, equipment operation, and turf maintenance. Upon completion, students should be able to perform various techniques essential to maintaining the fall landscape.

LSG 122 Spring Gardening Lab (0 6 0 2)
Prerequisites: None; Corequisites: None
This course provides basic hands-on experience in spring gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, and landscape construction. Upon completion, students should be able to perform various techniques essential to maintaining the landscape in the spring season.

LSG 123 Summer Gardening Lab (0 6 0 2)
Prerequisites: None; Corequisites: None
This course provides basic hands-on experience in summer gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, landscape construction, and maintaining fruits and vegetables. Upon completion, students should be able to perform various techniques essential to maintaining the summer landscape.

LSG 231 Landscape Supervision (2 6 0 4)
Prerequisites: LSG 123 and HOR 260; Corequisites: None
This course provides experience in planning, implementing, and supervising various landscape management projects. Emphasis is placed on supervisory skills, organizing, and scheduling. Upon completion, students should be able to supervise employees in various landscape management jobs.

MAC - MACHINING

MAC 111 Machining Technology I (2 12 0 6)
Prerequisites: None; Corequisites: None
This course introduces basic machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 112 Machining Technology II (2 12 0 6)
Prerequisites: MAC 111; Corequisites: None
This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 113 Machining Technology III (2 12 0 6)
Prerequisites: MAC 112; Corequisites: None
This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications.

MAC 122 CNC Turning (1 3 0 2)
Prerequisites: None; Corequisites: None
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

MAC 124 CNC Milling (1 3 0 2)
Prerequisites: None; Corequisites: 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.

MAC 131 Blueprint Reading/Mach I (1 2 0 2)
Prerequisites: None; Corequisites: None
This course covers the basic principles of blueprint reading and sketching. Topics include multi-view drawings; interpretation of conventional lines; and dimensions, notes, and thread notations. Upon completion, students should be able to interpret basic drawings, visualize parts, and make pictorial sketches.

MAC 132 Blueprint Reading/Mach II (1 2 0 2)
Prerequisites: MAC 131; Corequisites: None
This course introduces more complex industrial blueprints. Emphasis is placed on auxiliary views, section views, violations of true project, special views, applications of GD & T, and interpretation of complex parts. Upon completion, students should be able to read and interpret complex industrial blueprints.

MAC 151 Machining Calculations (1 2 0 2)
Prerequisites: None; Corequisites: None
This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.
MAC 241 Jigs & Fixtures I (2 6 0 4)
Prerequisites: MAC 112; Corequisites: None
This course introduces the application and use of jigs and fixtures. Emphasis is placed on design and manufacture of simple jigs and fixtures. Upon completion, students should be able to design and build simple jigs and fixtures.

MAC 243 Die Making I (2 6 0 4)
Prerequisites: MAC 112; Corequisites: None
This course introduces the principles and applications of die making. Topics include types, construction, and application of dies. Upon completion, students should be able to design and build simple dies.

MAC 245 Mold Construction I (2 6 0 4)
Prerequisites: MAC 112; Corequisites: None
This course introduces the principles of mold making. Topics include types, construction, and application of molds. Upon completion, students should be able to design and build simple molds.

MAT - MATHEMATICS

MAT 050 Basic Math Skills (3 2 0 4)
Prerequisites: None; Corequisites: None
This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems.

MAT 060 Essential Mathematics (3 2 0 4)
Prerequisites: MAT 050; 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 0 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. This course is also available through the Virtual Learning Community (VLC).

MAT 080 Intermediate Algebra (3 2 0 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 090 Accelerated Algebra (3 2 0 4)
Prerequisites: MAT 060; Corequisites: RED 080 or ENG 085
This course covers algebraic concepts with emphasis on applications. Topics include those covered in MAT 070 and MAT 080. Upon completion, students should be able to apply algebraic concepts in problem solving using appropriate technology.

MAT 101 Applied Mathematics I (2 2 0 3)
Prerequisites: MAT 060; Corequisites: None
This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study.

MAT 115 Mathematical Models (2 2 0 3)
Prerequisites: MAT 070; Corequisites: None
This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

MAT 121 Algebra and Trigonometry (2 2 0 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 and radical functions; complex numbers; right triangle trigonometry; systems of equations; 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 0 0 3)
Prerequisites: MAT 121; Corequisites: None
This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors, and statistics. 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 0 3)
Prerequisites: MAT 070, MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 161, MAT 171, or MAT 175; Corequisites: None
This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics may 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. This course is also available through the Virtual Learning Community (VLC).

MAT 141 Mathematical Concepts I (3 0 0 3)
Prerequisites: MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 161, MAT 171, or MAT 175; Corequisites: None
This course is the first of a two-course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on sets, logic, number bases, elementary number theory, introductory algebra, measurement including metrics, and problem solving. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 142 Mathematical Concepts II (3 0 0 3)
Prerequisites: MAT 141; Corequisites: None
This course is the second of a two-course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on probability, statistics, functions, introductory geometry, and mathematics of finance. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts and utilize technology as a mathematical tool. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirements in natural sciences/mathematics.

MAT 151 Statistics I (3 0 0 3)
Prerequisites: MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 140, MAT 161, MAT 171, or MAT 175; Corequisites: 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 (Quantitative Option). This course is also available through the Virtual Learning Community (VLC).

MAT 151A Statistics I Lab (0 2 0 1)
Prerequisites: MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 161, MAT 171, or MAT 175; Corequisites: MAT 151
This course is a laboratory for MAT 151. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 161 College Algebra (3 0 0 3)
Prerequisites: MAT 080, MAT 090, or MAT 095; Corequisites: None
This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, 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 for the Associate in Arts Degree. This course is also available through the Virtual Learning Community (VLC).

MAT 161A College Algebra Lab (0 2 0 1)
Prerequisites: MAT 080, MAT 090, or MAT 095; Corequisites: MAT 161
This course is a laboratory for MAT 161. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
MAT 162 College Trigonometry (3 0 0 3)
Prerequisites: MAT 161; Corequisites: None
This course provides an integrated technological approach to trigonometric applications used in problem solving. Emphasis is placed on applications involving 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 162A College Trig Lab (0 2 0 1)
Prerequisites: MAT 161; Corequisites: MAT 162
This course is a laboratory for MAT 162. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve practical problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 165 Finite Mathematics (3 0 0 3)
Prerequisites: MAT 161, MAT 171, or MAT 175; Corequisites: None
This course provides topics used to formulate models and to solve and interpret solutions using an algorithmic approach. Topics include linear algebra, linear programming, simplex method, sets and counting, probability, mathematics of finance, and logic. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts of finite mathematics and the ability to solve related problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 171 Precalculus Algebra (3 0 0 3)
Prerequisites: MAT 080, MAT 090, MAT 095, or MAT 161; Corequisites: None
This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, 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 predictions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

MAT 171A Precalculus Algebra Lab (0 2 0 1)
Prerequisites: MAT 080, MAT 090, MAT 095, or MAT 161; Corequisites: MAT 171
This course is a laboratory for MAT 171. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 172 Precalculus Trigonometry (3 0 0 3)
Prerequisites: MAT 171; Corequisites: None
This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, vectors, and polar coordinates. 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 172A Precalculus Trig Lab (0 2 0 1)
Prerequisites: MAT 171; Corequisites: MAT 172
This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve practical problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 175 Precalculus (4 0 0 4)
Prerequisites: None; Corequisites: None
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 predictions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).

MAT 175A Precalculus Lab (0 2 0 1)
Prerequisites: None; Corequisites: MAT 175
This course is a laboratory for MAT 175. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
MAT 263 Brief Calculus (3 0 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 263A Brief Calculus Lab (0 2 0 1)
Prerequisites: MAT 161, MAT 171, or MAT 175; Corequisites: MAT 263
This course is a laboratory for MAT 263. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 271 Calculus I (3 2 0 4)
Prerequisites: MAT 172 or MAT 175; Corequisites: None
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 0 4)
Prerequisites: MAT 271; Corequisites: None
This course provides a rigorous treatment of integration and is the second calculus course in a three-course 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 0 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 280 Linear Algebra (3 0 0 3)
Prerequisites: MAT 271; Corequisites: None
This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MAT 285 Differential Equations (3 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

MEC - MECHANICAL

MEC 110 Intro to CAD/CAM (1 2 0 2)
Prerequisites: None; 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.

MEC 111 Machine Processes I (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely machine simple parts to specified tolerances.
MEC 145 Mfg Materials I (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

MEC 231 Comp-Aided Manufact I (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces computer-aided design / manufacturing (CAD / CAM) applications and concepts. Topics include software, programming, data transfer and verification, and equipment setup. Upon completion, students should be able to produce parts using CAD / CAM applications.

MED - MEDICAL ASSISTING

MED 110 Orientation to Med Assist (1 0 0 1)
Prerequisites: Admission to Medical Assisting Program or Departmental permission; Corequisites: MED 118, MED 130 or Departmental Permission
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 118 Medical Law and Ethics (2 0 0 2)
Prerequisites: Admission to Medical Assisting Program; Corequisites: MED 110, MED 130 or Departmental Permission
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 120 Survey of Med Terminology (2 0 0 2)
Prerequisites: None; Corequisites: None
This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

MED 121 Medical Terminology I (3 0 0 3)
Prerequisites: None; Corequisites: None
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: Admission to Medical Assisting Program; Corequisites: MED 110, MED 118 or Departmental Permission
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.

MED 131 Admin Office Proc II (1 2 0 2)
Prerequisites: MED 130; Corequisites: MED 140, MED 150 or Departmental Permission
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 and MED 122; Corequisites: MED 232 or Departmental Permission
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: MED 110; Corequisites: MED 150, MED 131 or Departmental Permission
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: MED 110; Corequisites: MED 140, MED 131 or Departmental Permission
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 232 Medical Insurance Coding (1 3 0 2)**
Prerequisites: None; Corequisites: None
This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

**MED 240 Exam Room Procedures II (3 4 0 5)**
Prerequisites: MED 140, MED 260 & MED 262; 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.

**MED 260 Med Clinical Externship (0 0 15 5)**
Prerequisites: MED 140, MED 150; Corequisites: MED 262
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 262 Clinical Perspectives (1 0 0 1)**
Prerequisites: MED 140, MED 150; Corequisites: MED 260
This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem-solving skills. Upon completion, students should be able to demonstrate courteous and diplomatic behavior when solving problems in the medical facility.

**MED 264 Medical Assisting Overview (2 0 0 2)**
Prerequisites: MED 240; Corequisites: MED 272, MED 276, MED 270 or Departmental Permission
This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be able to demonstrate competence in the areas covered on the national certification examination for medical assistants.

**MED 270 Symptomatology (2 2 0 3)**
Prerequisites: MED 240; Corequisites: MED 276, MED 272, MED 264 or Departmental Permission
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: MED 240; Corequisites: MED 276, MED 272, MED 264 or Departmental Permission
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.

**MED 276 Patient Education (1 2 0 2)**
Prerequisites: MED 240; Corequisites: MED 270, MED 272, MED 264 or Departmental Permission
This course is designed to provide communication skills, basic education principles, and knowledge of available community resources and to apply this knowledge to the clinical setting. Emphasis is placed on identifying appropriate community resources, developing patient education materials, and perfecting written and oral communication skills. Upon completion, students should be able to instruct, communicate effectively, and act as a liaison between the patient and community agencies.

**MKT - MARKETING**

**MKT 120 Principles of Marketing (3 0 0 3)**
Prerequisites: None; Corequisites: None
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. This course is also available through the Virtual Learning Community (VLC).
MKT 220 Advertising and Sales Promotions (3 0 0 3)
Prerequisites: None; 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. This course is also available through the Virtual Learning Community (VLC).

MNT - MAINTENANCE

MNT 110 Intro to Mant Procedures (1 3 0 2)
Prerequisites: None; 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 230 Pumps & Piping Systems (1 3 0 2)
Prerequisites: None; 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.

MNT 240 Induct Equip Troubleshoot (1 3 0 2)
Prerequisites: None; Corequisites: None
This course covers the various service procedures, tools, instruments, and equipment necessary to analyze and repair typical industrial equipment. Emphasis is placed on electromechanical and fluid power equipment troubleshooting, calibration, and repair, including common techniques and procedures. Upon completion, students should be able to troubleshoot and repair industrial equipment.

MRI - MAGNETIC RESONANCE IMAGING

Program enrollment required to take MRI courses.

MRT 210 MRI Physics and Equipment (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers the physical principles of image formation, data acquisition, and image processing in magnetic resonance imaging. Emphasis is placed on instrumentation, fundamentals, pulse sequences, data manipulation, imaging parameters, options, and their effects on image quality. Upon completion, students should be able to understand the principles behind image formation, data acquisition, and image processing in magnetic resonance imaging.

MRI 211 MRI Procedures (4 0 0 4)
Prerequisites: None; Corequisites: None
This course covers patient care, magnetic field safety, cross-sectional anatomy, contrast media, and scanning procedures in magnetic resonance imaging. Emphasis is placed on patient assessment and monitoring, safety precautions, contrast agents’ use, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of imaging procedures in magnetic resonance imaging.

MRI 231 MRI Clinical Practicum (0 0 33 11)
Prerequisites: None; Corequisites: None
This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.

MTH - THERAPEUTIC MASSAGE

MTH 110 Fundamentals of Massage (6 9 3 10)
Prerequisites: None; Corequisites: None
This course introduces concepts basic to the role of the massage therapist. Emphasis is placed on beginning theory and techniques of body work as well as skill in therapeutic touch. Upon completion of the course, the student should be able to apply basic practical massage therapy skills.

MTH 120 Ther Massage Applications (6 9 3 10)
Prerequisites: MTH 110; Corequisites: None
This course provides an expanded knowledge and skill base for the massage therapist. Emphasis is placed on selected therapeutic approaches throughout the lifespan. Upon completion, students should be able to perform entry level therapeutic massage on various populations.

MTH 121 Clinical Supplement I (0 0 3 1)
Prerequisites: None; Corequisites: MTH 110, MTH 120, MTH 125, MTH 210, or MTH 220
This course is designed to introduce the student to a variety of clinical experiences. Emphasis is placed on applying the therapeutic massage process across the lifespan. Upon completion, students should be able to demonstrate delivery of massage techniques in a clinical setting.

MTH 125 Ethics of Massage (2 0 0 2)
Prerequisites: None; Corequisites: None
This course is designed to explore issues related to the practice of massage therapy. Emphasis is placed on ethical,
legal, professional, and political issues. Upon completion, students should be able to discuss issues relating to the practice of massage therapy, client/therapist relationships as well as ethical issues.

**MTH 210 Adv Skills of Massage (4 9 3 8)**
Prerequisites: MTH 120 or MTH 121; Corequisites: None
This course provides knowledge and skills in diverse body work modalities. Emphasis is placed on selected techniques such as Neuromuscular Therapy, Sports Massage, Soft Tissue Release, Spa Approaches, Oriental Therapies, and energy techniques. Upon completion, students should be able to perform basic skills in techniques covered.

**MTH 220 Outcome-Based Massage (4 6 3 7)**
Prerequisites: MTH 120, MTH 121, or MTH 221; Corequisites: None
This course provides knowledge and skills in more complex body works modalities. Emphasis is placed on developing advanced skills in outcome-based Massage. Upon completion, students should be able to perform basic skills in techniques covered.

**MTH 221 Clinical Supplement II (0 0 6 2)**
Prerequisites: MTH 110; Corequisites: MTH 120, MTH 125, MTH 210, or MTH 220
This course is designed to be offered as an advanced clinical experience. Emphasis is placed on applying an advanced therapeutic massage process across the lifespan. Upon completion, students should be able to demonstrate delivery of massage at an advanced level in a clinical setting.

**MUS - MUSIC**

**MUS 110 Music Appreciation (3 0 0 3)**
Prerequisites: None; 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.

**MUS 111 Fundamentals of Music (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 112 Introduction to Jazz (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**MUS 113 American Music (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**MUS 114 Non-Western Music (3 0 0 3)**
Prerequisites: None; Corequisites: None
This course provides a basic survey of the music of the non-Western world. Emphasis is placed on non-traditional instruments, sources, and performing practices. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of non-Western music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**MUS 121 Music Theory I (3 2 0 4)**
Prerequisites: None; Corequisites: None
This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**MUS 122 Music Theory II (3 2 0 4)**
Prerequisites: MUS 121; Corequisites: None
This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and
application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 132 Chorus II (0 2 0 1)
Prerequisites: MUS 131; Corequisites: None
This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 133 Band I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides an opportunity for those who play a band instrument to gain experience playing in an ensemble. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 134 Band II (0 2 0 1)
Prerequisites: MUS 133; Corequisites: None
This course is a continuation of MUS 133. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon comple-
tion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 131 Chorus I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 133 Band I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides an opportunity for those who play a band instrument to gain experience playing in an ensemble. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 142 Ensemble II (0 2 0 1)
Prerequisites: MUS 141; Corequisites: None
This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 141 Ensemble I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 151 Class Music I (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 152 Class Music II (0 2 0 1)
Prerequisites: MUS 151; Corequisites: None
This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 161 Applied Music I (1 2 0 2)
Prerequisites: None; Corequisites: None
This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study
of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 161P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 162 Applied Music II (1 2 0 2)
Prerequisites: MUS 161; Corequisites: None
This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 162P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 170 Business of Music (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the basic elements of the music business. Topics include copyright law, musical arrangements and abridgements, recording and songwriting contracts, agents and managers, performing rights organizations, and the musician’s union. Upon completion, students should be able to demonstrate an understanding of the basic elements of the music business. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 210 History of Rock Music (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is a survey of Rock music from the early 1950’s to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

MUS 211 History of Country Music (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the varied origins of country music and the commercialization of this art form. Emphasis is placed on historical, sociocultural, and stylistic factors related to country music and musicians. Upon completion, students should be able to identify specific styles and explain the influence of pop culture on the development of country music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

MUS 217 Elementary Conducting (1 2 0 2)
Prerequisites: MUS 111; Corequisites: None
This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 221 Music Theory III (3 2 0 4)
Prerequisites: MUS 122; Corequisites: None
This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 222 Music Theory IV (3 2 0 4)
Prerequisites: MUS 221; Corequisites: None
This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 231 Chorus III (0 2 0 1)
Prerequisites: MUS 132; Corequisites: None
This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 232 Chorus IV (0 2 0 1)
Prerequisites: MUS 231; Corequisites: None
This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.
MUS 233 Band III (0 2 0 1)
Prerequisites: MUS 134; Corequisites: None
This course is a continuation of MUS 134. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 234 Band IV (0 2 0 1)
Prerequisites: MUS 233; Corequisites: None
This course is a continuation of MUS 233. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 241 Ensemble III (0 2 0 1)
Prerequisites: MUS 142; Corequisites: None
This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 242 Ensemble IV (0 2 0 1)
Prerequisites: MUS 241; Corequisites: None
This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 251 Class Music III (0 2 0 1)
Prerequisites: MUS 152; Corequisites: None
This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 251P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

MUS 252 Class Music IV (0 2 0 1)
Prerequisites: MUS 251; Corequisites: None
This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 252P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

MUS 261 Applied Music III (1 2 0 2)
Prerequisites: MUS 162; Corequisites: None
This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 261P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 262 Applied Music IV (1 2 0 2)
Prerequisites: MUS 261; Corequisites: None
This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 262P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

MUS 280 Music for the El Classroom (3 0 0 3)
Prerequisites: MUS 110; Corequisites: None
This course covers the skills necessary for teaching music in the elementary school. Emphasis is placed on integrating music activities which are suitable for all ages of elementary students, including theory, performance, and conducting, into classroom activities. Upon completion, students should be able to utilize a variety of music activities in the elementary school classroom. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

NET - NETWORKING TECHNOLOGY

NET 110 Networking Concepts (2 2 0 3)
Prerequisites: None; Corequisites: None
This course introduces 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.
NET 125 Networking Basics  (1 4 0 3)
Prerequisites: None; Corequisites: None
This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

NET 126 Routing Basics  (1 4 0 3)
Prerequisites: NET 125; Corequisites: None
This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

NET 225 Routing & Switching I  (1 4 0 3)
Prerequisites: NET 126; Corequisites: None
This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.

NET 226 Routing & Switching II  (1 4 0 3)
Prerequisites: NET 225; Corequisites: None
This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

NET 289 Networking Project  (1 4 0 3)
Prerequisites: None; Corequisites: NET 226
This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

NMT - NUCLEAR MEDICINE

Program enrollment required to take NMT courses.

NMT 110 Intro to Nuclear Medicine  (2 0 0 2)
Prerequisites: None; Corequisites: None
This course provides a comprehensive introduction to the field of nuclear medicine. Topics include overview of school, program, and profession; medical terminology and ethics; medical legal issues; general patient care and radiation safety practices; and departmental organization. Upon completion, students should be able to utilize various learning resources and demonstrate understanding of radiation safety standards and ethical, professional conduct.

NMT 126 Nuclear Physics  (2 0 0 2)
Prerequisites: NMT 110; Corequisites: None
This course introduces the fundamental principles of the physics that underlie nuclear medicine. Topics include atomic structure, electromagnetic and particulate radiation, decay schemes, production of radionuclides with emphasis on radionuclide generators, and decay calculations. Upon completion, students should be able to demonstrate an understanding of the physical concepts covered in the course.

NMT 132 Overview-Clinical Nuc Med  (2 0 6 4)
Prerequisites: NMT 110; Corequisites: None
This course is designed to familiarize students with the clinical practice of nuclear medicine. Emphasis is placed on the routine clinical procedures, radiopharmaceuticals and dosage, equipment manipulation, and basic patient care. Upon completion, students should be able to demonstrate integration of the principles covered in the classroom with the clinical experience.

NMT 134 Nuclear Pharmacy  (2 0 0 2)
Prerequisites: NMT 110; Corequisites: None
This course covers the formulation and application of radio- pharmaceuticals. Topics include the preparation, handling, disposition, and quality control of clinically useful radiopharmaceuticals. Upon completion, students should be able to discuss the appropriate use and disposition of radiopharmaceuticals currently used in clinical nuclear medicine.

NMT 211 NMT Clinical Practice I  (0 0 21 7)
Prerequisites: NMT 132; Corequisites: None
This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclide. Upon completion, students should be able to demonstrate performance of the procedures covered in the course.
NMT 212  Proc for Nuclear Med I  (2 0 0 2)  
Prerequisites: NMT 132; Corequisites: None  
This course begins the in-depth study of clinical procedures performed by nuclear medicine technologists. Emphasis is placed on dose administration, use of instrumentation, computer applications, and normal and abnormal presentation. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures presented in the course.

NMT 215  Non-Imaging Instrumentation  (1 3 0 2)  
Prerequisites: NMT 132; Corequisites: None  
This course covers the proper operation of various types of non-imaging equipment used in nuclear medicine. Emphasis is placed on principles of radiation detection, quality control procedures, various counting problems, and machine-specific operating procedures. Upon completion, students should be able to demonstrate the proper use of the devices discussed in the course.

NMT 217 Radiobiology and Protection  (2 0 0 2)  
Prerequisites: NMT 132; Corequisites: None  
This course covers the principles of radiation biology. Emphasis is placed on the effects of ionizing radiation on body tissue, uses of radiation in medicine, and protective measures. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in nuclear medicine.

NMT 221  NMT Clinical Practice II  (0 0 21 7)  
Prerequisites: NMT 132; Corequisites: None  
This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclides. Upon completion, students should be able to demonstrate performance of the procedures covered in this course.

NMT 222  Proc for Nuclear Med II  (2 0 0 2)  
Prerequisites: NMT 132; Corequisites: None  
This course concludes the in-depth study of clinical procedures performed in nuclear medicine. Topics include method of dose administration, data acquisition parameters, computer use, and data patterns consistent with normal and described pathological states. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures discussed in the course.

NMT 289  Nuc Med Tech Topics  (2 3 0 3)  
Prerequisites: NMT 211; Corequisites: NMT 222  
This course covers professional practice in nuclear medicine. Emphasis is placed on the procedures vital to a clinical nuclear medicine staff technologist. Upon completion, students should be able to demonstrate a comprehensive knowledge of nuclear medicine and be prepared for the comprehensive examination.

NOS - NETWORKING OPERATING SYSTEMS

NOS 110 Operating System Concepts  (2 3 0 3)  
Prerequisites: None; Corequisites: None  
This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

NOS 120 Linux/UNIX Single User  (2 2 0 3)  
Prerequisites: NOS 110; Corequisites: None  
This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

NOS 130 Windows Single User  (2 2 0 3)  
Prerequisites: NOS 110; Corequisites: None  
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

NOS 220 Linux/UNIX Admin I  (2 2 0 3)  
Prerequisites: NOS 120; Corequisites: None  
This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network.

NOS 230 Windows Admin I  (2 2 0 3)  
Prerequisites: NOS 130; Corequisites: None  
This course covers the installation and administration of a Windows Server network operating system. Topics include managing and maintaining physical and logical devices, access to resources, the server environment, managing users, computers, and groups, and Managing/Implementing Disaster
Recovery. Upon completion, students should be able to manage and maintain a Windows Server environment.

NOS 240 Novell Admin I (2 2 0 3)
Prerequisites: NOS 110; Corequisites: None
This course will introduce students to the Novell network operating system. Topics include installing and using NetWare, managing printing, storage space, implementing Internet services, and managing security. Upon completion, students should have basic knowledge about implementing NetWare and using its management tools.

NUR - NURSING

NUR 111 Intro to Health Concepts (4 6 6 8)
Prerequisites: Admission to Associate Degree Nursing; Corequisites: None
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 112 Health-Illness Concepts (3 0 6 5)
Prerequisites: NUR 111; Corequisites: NUR 114
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 113 Family Health Concepts (3 0 6 5)
Prerequisites: NUR 111, NUR 112, NUR 114; Corequisites: NUR 211, NUR 212
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 114 Holistic Health Concepts (3 0 6 5)
Prerequisites: NUR 111; Corequisites: NUR 112
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of metabolism, cellular regulation, oxygenation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 211 Health Care Concepts (3 0 6 5)
Prerequisites: NUR 111, NUR 112, NUR 114; Corequisites: NUR 113, NUR 212
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 212 Health System Concepts (3 0 6 5)
Prerequisites: NUR 111, NUR 112, NUR 114; Corequisites: NUR 113, NUR 211
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 213 Complex Health Concepts (4 3 15 10)
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212; Corequisites: None
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

NUR 214 Nsg. Transition Concepts (3 0 3 4)
Prerequisites: Admissions to Associate Degree Nursing LPN-ADN; Corequisites: None
This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the LPN transitions to the ADN role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, clinical decision-making, informatics, assessment, caring, and health-wellness-illness. Upon completion, students should...
be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 221 LPN to ADN Concepts I (6 0 9 9)
Prerequisites: NUR 214; Corequisites: None
This course is designed for the LPN to ADN student to explore the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of safety, perfusion, inflammation, oxygenation, mood/ affect, behavior, development, family, health-wellness-illness, sensory perception, stress/coping, cognition, self, violence, and professional behaviors. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 223 LPN to ADN Concepts II (6 0 9 9)
Prerequisites: NUR 221; Corequisites: None
This course is designed for the LPN to ADN student to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, thermoregulation, oxygenation, tissue integrity, infection, perfusion, mobility, reproduction, sexuality, health-wellness-illness, professional behaviors, accountability, advocacy, and collaboration. Upon completion, student should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry-level nursing care.

NUT - NUTRITION

NUT 110 Nutrition (3 0 0 3)
Prerequisites: None; Corequisites: None
This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with food selection. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well-being.

OST - OFFICE SYSTEMS TECHNOLOGY

OST 131 Keyboarding (1 2 0 2)
Prerequisites: None; Corequisites: None
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 132 Keyboard Skill Building (1 2 0 2)
Prerequisites: None; Corequisites: None
This course is designed to increase speed and improve accuracy in keyboarding. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

OST 134 Text Entry & Formatting (2 2 0 3)
Prerequisites: None; Corequisites: None
This course is designed to provide 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 documents and key timed writings at speeds commensurate with employability.

OST 136 Word Processing (2 2 0 3)
Prerequisites: None; Corequisites: None
This course is designed to introduce 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 environment.

OST 148 Med Coding Billing & Insu (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces fundamentals of medical coding, billing, and insurance. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

OST 149 Medical Legal Issues (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

OST 162 Executive Terminology (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is designed to increase and improve proficiency in word usage. Topics include root words, prefixes, suffixes, homonyms, synonyms, and specialized vocabularies. Upon completion, students should be able to use acquired vocabulary skills in the global workplace.

OST 164 Text Editing Applications (3 0 0 3)
Prerequisites: None; Corequisites: None
This 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 184 Records Management (2 2 0 3)
Prerequisites: None; Corequisites: None
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 233 Office Publications Design (2 2 0 3)
Prerequisites: OST 136; Corequisites: None
This course provides an in-depth study of diagnostic coding. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST 236 Adv Word/Information Proc (2 2 0 3)
Prerequisites: OST 136; Corequisites: None
This course develops proficiency in the utilization of advanced word/information processing features. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents.

OST 241 Medical Office Transcription I (1 2 0 2)
Prerequisites: MED 121 or OST 141; Corequisites: None
This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

OST 243 Medical Office Simulation (2 2 0 3)
Prerequisites: OST 148; Corequisites: None
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

OST 247 Procedure Coding (1 2 0 2)
Prerequisites: MED 121 or OST 141; Corequisites: None
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

OST 248 Diagnostic Coding (1 2 0 2)
Prerequisites: MED 121 or OST 141; Corequisites: None
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST 284 Emerging Technologies (1 2 0 2)
Prerequisites: None; Corequisites: None
This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional.

OST 289 Administrative Office Mgt (2 2 0 3)
Prerequisites: OST 164 and either OST 134 or OST 136; Corequisites: None
This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment.

PED - PHYSICAL EDUCATION

PED 110 Fit and Well for Life (1 2 0 2)
Prerequisites: None; Corequisites: None
This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 111 Physical Fitness I (0 3 0 1)
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 112 Physical Fitness II (0 3 0 1)
Prerequisites: PED 111; Corequisites: None
This course is a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment.
satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 113 Aerobics I (0 3 0 1)**
Prerequisites: None; Corequisites: None
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 rhythmical aerobic exercise program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 114 Aerobics II (0 3 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 117 Weight Training I (0 3 0 1)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 118 Weight Training II (0 3 0 1)**
Prerequisites: PED 117; Corequisites: None
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight-training program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 120 Walking for Fitness (0 3 0 1)**
Prerequisites: None; Corequisites: None
This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 122 Yoga I (0 2 0 1)**
Prerequisites: None; Corequisites: None
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**PED 128 Golf-Beginning (0 2 0 1)**
Prerequisites: None; Corequisites: None
This course emphasizes the fundamentals of golf. Topics include the proper grip, 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 129 Golf-Intermediate (0 2 0 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 to demonstrate the knowledge and ability to play a recreational round of golf. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 130 Tennis-Beginning (0 2 0 1)**
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 131 Tennis-Intermediate (0 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

**PED 132 Racquetball-Beginning (0 2 0 1)**
Prerequisites: None; 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 133 Racquetball-Intermediate (0 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 137 Badminton (0 2 0 1)
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 138 Archery (0 2 0 1)
Prerequisites: None; Corequisites: None
This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 139 Bowling-Beginning (0 2 0 1)
Prerequisites: None; Corequisites: 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 142 Lifetime Sports (0 2 0 1)
Prerequisites: None; Corequisites: 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 143 Volleyball-Beginning (0 2 0 1)
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 144 Volleyball-Intermediate (0 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 145 Basketball-Beginning (0 2 0 1)
Prerequisites: None; Corequisites: None
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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 146 Basketball-Intermediate (0 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 147 Soccer (0 2 0 1)
Prerequisites: None; Corequisites: None
This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 148 Softball (0 2 0 1)
Prerequisites: None; Corequisites: None
This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in recreational softball. This course has been
approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 149 Flag Football  
(0 2 0 1)
Prerequisites: None; Corequisites: None
This course introduces the fundamentals and rules of flag football. Emphasis is placed on proper techniques and strategies for playing in game situations. Upon completion, students should be able to participate in recreational flag football. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 150 Baseball-Beginning  
(0 3 0 1)
Prerequisites: None; Corequisites: None
This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 151 Baseball-Intermediate  
(0 3 0 1)
Prerequisites: PED 150; Corequisites: None
This course covers more advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 152 Swimming-Beginning  
(0 2 0 1)
Prerequisites: None; Corequisites: None
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning basic strokes. Upon completion, students should be able to demonstrate basic swimming skills and be able to tread water, back float, and use the crawl stroke for 20 yards. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 153 Swimming-Intermediate  
(0 2 0 1)
Prerequisites: PED 152; Corequisites: None
This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissors kick, the underwater swim, and other related skills. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 154 Swimming for Fitness  
(0 3 0 1)
Prerequisites: None; Corequisites: None
This course introduces lap swimming, aquacises, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 155 Water Aerobics  
(0 3 0 1)
Prerequisites: None; Corequisites: None
This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually paced exercise program. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 160 Canoeing-Basic  
(0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides basic instruction for the beginning canoeist. Emphasis is placed on safe and correct handling of the canoe and rescue skills. Upon completion, students should be able to demonstrate basic canoeing, safe-handling, and self-rescue skills. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 170 Backpacking  
(0 2 0 1)
Prerequisites: None; Corequisites: None
This course covers the proper techniques for establishing a campsite, navigating in the wilderness, and planning for an overnight trip. Topics include planning for meals, proper use of maps and compass, and packing and dressing for extended periods in the outdoors. Upon completion, students should be able to identify quality backpacking equipment, identify the principles of no-trace camping, and successfully complete a backpacking experience. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 171 Nature Hiking  
(0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides instruction on how to equip and care for oneself on the trail. Topics include clothing, hygiene, trail ethics, and necessary equipment. Upon completion, students should be able to successfully participate in nature trail hikes. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
PED 172 Outdoor Living (1 2 0 2)
Prerequisites: None; Corequisites: None
This course is designed to acquaint the beginning camper with outdoor skills. Topics include cooking techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 174 Wilderness Pursuits (0 2 0 1)
Prerequisites: None; Corequisites: None
This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 181 Snow Skiing-Beginning (0 2 0 1)
Prerequisites: None; Corequisites: None
This course introduces the fundamentals of snow skiing. Topics include basic techniques, safety, and equipment involved in snow skiing. Upon completion, students should be able to ski a down slope, enter and exit a ski lift, and perform basic maneuvers on skis. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PED 186 Dancing for Fitness (0 2 0 1)
Prerequisites: None; Corequisites: None
This course is designed to develop movement and recreational dance skills, safety, fitness, coordination, and techniques used to teach various groups. Emphasis is placed on participation and practice with adapting dances for ages and ability levels. Upon completion, students should be able to demonstrate knowledge of fitness through social, folk, and square dance participation and instruction. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PED 211 New Games (0 2 0 1)
Prerequisites: None; Corequisites: None
This course includes explanation, demonstration, and participation in games that provide an alternative to traditional sports. Emphasis is placed on playing for pleasure rather than for competitive purposes. Upon completion, students should be able to participate and lead others in participating in non-competitive games. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PET - Positron Emission Tomography

PET 110 Introduction to PET (2 0 0 2)
Prerequisites: Departmental Permission; Corequisites: None
This course introduces the students to the Positron Emission Tomography profession. Topics include the history of the profession and the role of the PET technologist, medical ethics and legal issues, and department organizations. Upon completion, students should be able to demonstrate a basic understanding of the PET profession through computerized exams and projects.

PET 112 PET Procedures (3 0 3)
Prerequisites: Departmental Permission; Corequisites: None
This course covers the procedures of Positron Emission Tomography. Topics include all relevant procedures related to PET imaging with an emphasis placed on oncology, neurology and cardiology. Upon completion, students should be able to demonstrate competence in PET procedures through computerized exams and projects.

PHI - PHILOSOPHY

PHI 210 History of Philosophy (3 0 0 3)
Prerequisites: ENG 111; Corequisites: None
This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

PHI 215 Philosophical Issues (3 0 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.

PHI 230 Introduction to Logic (3 0 0 3)
Prerequisites: ENG 111; Corequisites: None
This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms,
truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning. This course has been approved to satisfy the Comprehensive Articulation general education core requirement in humanities/fine arts.

PHI 240 Introduction to Ethics (3 0 0 3)
Prerequisites: ENG 111; Corequisites: None
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).

PHI 250 Philosophy of Science (3 0 0 3)
Prerequisites: ENG 111 and MAT 161 or MAT 171 or MAT 175; Corequisites: None
This course introduces the concepts of empirical observations and laws and their role in scientific explanation, prediction, and theory formation. Topics include the relationship between the philosophy of science and inductive/deductive logic, analytic philosophy, logical empiricism, and explanatory paradigms. Upon completion, students should be able to describe the development and role of scientific explanation, prediction, theory formation, and explanatory paradigms in the natural and social sciences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PHM - PHARMACY

PHM 110 Introduction to Pharmacy (3 0 0 3)
Prerequisites: None; Corequisites: PHM 111 and PHM 115
This course introduces pharmacy practice and the technician’s role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance, and utilize pharmacy references.

PHM 111 Pharmacy Practice I (3 3 0 4)
Prerequisites: None; Corequisites: PHM 110 and PHM 115
This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retain settings under supervision of a registered pharmacist. Topics include drug packaging and labeling, out-patient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and non-sterile compounding. Upon completion, students should be able to perform basic supervised dispensing techniques in a variety of pharmacy settings.

PHM 115 Pharmacy Calculations (3 0 0 3)
Prerequisites: None; Corequisites: PHM 110 and PHM 111
This course provides an introduction to practice and perform calculations encountered in pharmacy practice. Emphasis is placed on ratio and proportion, dosage calculations, percentage, reduction/enlargement formulas, aliquots, flow rates, and specific gravity/density. Upon completion, students should be able to perform the calculations required to properly prepare a medication order.

PHM 115A Pharmacy Calculations Lab (0 2 0 1)
Prerequisites: None; Corequisites: None
This course provides an opportunity to practice and perform calculations encountered in pharmacy practice. Emphasis is placed on ratio and proportion, dosage calculations, percentage, reduction/enlargement formulas, aliquots, flow rates, and specific gravity/density. Upon completion, students should be able to perform the calculations required to properly prepare a medication order.

PHM 118 Sterile Products (3 3 0 4)
Prerequisites: PHM 110 and PHM 111; Corequisites: None
This course provides an introduction to intravenous admixture preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques; facilities, equipment, and supplies utilized in admixture preparation; incompatibility and stability; laminar flow hoods; immunizations and irrigation solutions; and quality assurance. Upon completion, students should be able to describe and demonstrate the steps involved in preparation of intermittent and continuous infusions, total parenteral nutrition, and chemotherapy.

PHM 120 Pharmacology I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

PHM 125 Pharmacology II (3 0 0 3)
Prerequisites: PHM 120; Corequisites: None
This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and
central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

PHM 132 Pharmacy Clinical (0 0 6 2)
Prerequisites: None; Corequisites: None
This course provides an opportunity to work in pharmacy settings under a pharmacist’s supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM 133 Pharmacy Clinical (0 0 9 3)
Prerequisites: None; Corequisites: None
This course provides an opportunity to work in pharmacy settings under a pharmacist’s supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM 134 Pharmacy Clinical (0 0 12 4)
Prerequisites: None; Corequisites: None
This course provides an opportunity to work in pharmacy settings under a pharmacist’s supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM 136 Pharmacy Clinical (0 0 18 6)
Prerequisites: None; Corequisites: None
This course provides an opportunity to work in pharmacy settings under a pharmacist’s supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM 140 Trends in Pharmacy (2 0 0 2)
Prerequisites: None; Corequisites: None
This course covers the major issues, trends, and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement, and the latest developments in pharmacy technician practice. Upon completion, students should be able to demonstrate a basic knowledge of the topics discussed.

PHM 150 Hospital Pharmacy (3 3 0 4)
Prerequisites: None; Corequisites: PHM 118
This course provides an in-depth study of hospital pharmacy practice. Topics include hospital organizational structure, committee functions, utilization of reference works, purchasing and inventory control, drug delivery systems, and intravenous admixture preparation. Upon completion, students should be able to explain hospital organization/committee functions, interpret and enter patient orders, fill unit-dose cassettes, and prepare intravenous admixtures.

PHM 155 Community Pharmacy (2 2 0 3)
Prerequisites: None; Corequisites: None
This course covers the operational procedures relating to retail pharmacy. Emphasis is placed on a general knowledge of over-the-counter products, prescription processing, business/inventory management, and specialty patient services. Upon completion, students should be able to provide technical assistance and support to the retail pharmacist.

PHM 160 Pharm Dosage Forms (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is a study of pharmaceutical dosage forms and their considerations in their manufacture. Topics include bioavailability, routes of administration, tablets, capsules, solutions, syrups, suspensions, elixirs, aerosols, transdermals, topicals, ophthalmics, otics, and other dosage forms. Upon completion, students should be able to describe the characteristics of the major dosage forms and explain how these characteristics affect the action of the drug.

PHM 165 Pharmacy Prof Practice (2 0 0 2)
Prerequisites: None; Corequisites: None
This course provides a general overview of all aspects of pharmacy technician practice. Emphasis is placed on pharmacy law, calculations, compounding, pharmacology, and pharmacy operations. Upon completion, students should be able to demonstrate competence in the areas required for the Pharmacy Technician Certification Examination.

PHO - PHOTOGRAPHY

PHO 132 Small-Format Photography (2 6 0 4)
Prerequisites: GRD 160; Corequisites: None
This course introduces small-format cameras and their application in location portraiture, industrial photography, photojournalism, and multimedia photography and portable lighting equipment and techniques. Topics include rapid camera operation, location photography, exposure techniques, portable flash, process modification, filtration, and simple
multimedia production. Upon completion, students should be able to produce professional quality images under a variety of adverse shooting conditions using the equipment and techniques studied.

**PHO 180 Creative Problem Solving  (1 4 0 3)**
*Prerequisites:* GRD 160; *Corequisites:* None
This course encourages the development of innovative photographic solutions to instructor-assigned tasks. Emphasis is placed on identifying components necessary to complete the task and applying creative solutions. Upon completion, students should be able to solve problems in a variety of photographic areas, combining media where needed to achieve the desired results.

**PHO 217 Photojournalism I  (1 6 0 4)**
*Prerequisites:* GRD 160; *Corequisites:* None
This course covers logistics and techniques used in current professional newspaper photography. Topics include detailed study of spot and general news, sports, and feature photography along with basic newspaper layout, advanced photographic techniques, and legal issues. Upon completion, students should be able to demonstrate an understanding of basic aspects of news, sports, and feature photography.

**PHO 226 Portraiture  (3 3 0 4)**
*Prerequisites:* GRD 160; *Corequisites:* None
This course covers the techniques of contemporary studio and location portraiture. Topics include lighting techniques, lighting ratios, available light to multiple light setups, posing techniques, and styles of glamour, fashion, corporate, and public relations portraiture. Upon completion, students should be able to choose the appropriate lighting, accessories, and posing style to produce a successful portrait.

**PHO 280 Photography Project  (1 6 0 3)**
*Prerequisites:* PHO 150; *Corequisites:* None
This course provides an opportunity to work in a specialized area of photography on an instructor-approved project. Emphasis is placed on the design and fulfillment of a project in macrophotography, photo bookmaking, or nature portfolio. Upon completion, students should be able to design and complete a photography project.

**PHY - PHYSICS**

**PHY 110 Conceptual Physics  (3 0 0 3)**
*Prerequisites:* None; *Corequisites:* None
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 110A Conceptual Physics Lab  (0 2 0 1)**
*Prerequisites:* None; *Corequisites:* PHY 110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 151 College Physics I  (3 2 0 4)**
*Prerequisites:* MAT 161, MAT 171 or MAT 175; *Corequisites:* 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 0 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 0 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 (3 0 4)
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, 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.

PME - POWER MECHANICS

PME 211 Adv Equipment Repair (2 6 0 4)
Prerequisites: None; Corequisites: None
This course provides advanced training in equipment repair through hands-on training along with additional training aids. Emphasis is placed on systems and components found on construction equipment. Upon completion, students should be able to adjust, troubleshoot, and repair most construction equipment systems.

POL - POLITICAL SCIENCE

POL 110 Intro Political Science (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

POL 120 American Government (3 0 0 3)
Prerequisites: None; Corequisites: None
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 State & Local Government (3 0 0 3)
Prerequisites: None; Corequisites: 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PSY - PSYCHOLOGY

PSY 101 Applied Psychology (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one’s personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living.

PSY 110 Life Span Development (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides an introduction to the study of human growth and development. Emphasis is placed on 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 and apply this knowledge to their specific field of study.

PSY 135 Group Processes (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides an examination of group dynamics and structure. Topics include team-building, interpersonal communication, leadership, decision making, and problem solving. Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

PSY 150 General Psychology (3 0 0 3)
Prerequisites: RED 090; 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 237 Social Psychology (3 0 0 3)
Prerequisites: PSY 150 or SOC 210; Corequisites: None
This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 239 Psychology of Personality (3 0 0 3)
Prerequisites: PSY 150; Corequisites: None
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

PSY 241 Developmental Psych (3 0 0 3)
Prerequisites: PSY 150; Corequisites: None
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 243 Child Psychology (3 0 0 3)
Prerequisites: PSY 150; Corequisites: None
This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PSY 246 Adolescent Psychology (3 0 0 3)
Prerequisites: PSY 150; Corequisites: 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 socio-cultural 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

PSY 256 Exceptional Children (3 0 0 3)
Prerequisites: PSY 150; Corequisites: None
This course introduces major exceptionalities in children including mental, emotional, and physical variations; learning disabilities; and giftedness. Emphasis is placed on theoretical perspectives, identification methods, and intervention strategies. Upon completion, students should be able to demonstrate a general knowledge of the exceptionalities of children and recommended intervention techniques.

PSY 263 Educational Psychology (3 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

PSY 281 Abnormal Psychology (3 0 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.

PTC - PHARMACEUTICAL TECHNOLOGY

PTC 110 Industrial Environment (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the pharmaceutical industry, including a broad overview of work in this field. Emphasis is placed on good manufacturing practices (GMP), work conduct, company organization, job expectations, personal safety, hygiene, and company rules and regulations. Upon completion, students should be able to follow good manufacturing practice regula-
tions and inspect a pharmaceutical manufacturing facility for compliance with GMP.

PTC 120 Pharmaceutical Quality Control (3 2 0 4)
Prerequisites: MAT 121 and PTC 110; Corequisites: None
This course covers the principles and techniques of quality control as found in the pharmaceutical industry. Emphasis is placed on lot inspection, sampling procedures, control charts, vendor auditing, statistical analysis, and Military Standard 105. Upon completion, students should be able to apply and follow the appropriate statistical sampling plans for Pharmaceutical Product Lot Acceptance.

RAD - RADIOGRAPHY
Program enrollment required to take RAD courses.

RAD 110 Radiography Introduction & Patient Care (2 3 0 3)
Prerequisites: None; Corequisites: RAD 111 and RAD 151
This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

RAD 111 RAD Procedures I (3 3 0 4)
Prerequisites: None; Corequisites: RAD 110 and RAD 151
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

RAD 112 RAD Procedures II (3 3 0 4)
Prerequisites: RAD 110 and RAD 111 and RAD 151; Corequisites: None
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

RAD 121 Radiographic Imaging I (2 3 0 3)
Prerequisites: RAD 110, RAD 111, and RAD 151; Corequisites: None
This course provides the principles of conventional film-screen radiography. Emphasis is placed on the factors that impact density, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of conventional film-screen radiographic imaging.

RAD 122 Radiographic Imaging II (1 3 0 2)
Prerequisites: RAD 112, RAD 121, and RAD 161; Corequisites: RAD 131 and RAD 171
This course provides advanced principles of imaging including digital radiography. Emphasis is placed on the factors that impact brightness, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of advanced principles of imaging.

RAD 131 Radiographic Physics I (1 3 0 2)
Prerequisites: None; Corequisites: None
This course introduces the principles of radiation characteristics and production. Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate a basic understanding of radiation characteristics and production.

RAD 151 RAD Clinical Ed I (0 0 6 2)
Prerequisites: None; Corequisites: RAD 110 and RAD 111
This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 161 RAD Clinical Ed II (0 0 15 5)
Prerequisites: RAD 110 and RAD 111 and RAD 151; Corequisites: RAD 112 and RAD 121
This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 171 RAD Clinical Ed III (0 0 12 4)
Prerequisites: RAD 112 and RAD 121 and RAD 161; Corequisites: RAD 122 and RAD 131
This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 211 RAD Procedures III (2 3 0 3)
Prerequisites: RAD 122; Corequisites: RAD 231, RAD 241, and RAD 251
This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures,
sectional anatomy, and advanced imaging. Upon completion, students should be able to demonstrate an understanding of these areas.

RAD 231 Radiographic Physics II (1 3 0 2)
Prerequisites: RAD 171 or RAD 131; Corequisites: None
This course provides advanced principles of radiation characteristics and production including digital imaging and Computed Tomography (CT). Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate an understanding of radiation characteristics and production.

RAD 241 Radiobiology/Protection (2 0 0 2)
Prerequisites: RAD 122, RAD 131, and RAD 171; Corequisites: RAD 211, RAD 231, and RAD 251
This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

RAD 245 Image Analysis (1 3 0 2)
Prerequisites: RAD 211, RAD 231, RAD 241 and RAD 251; Corequisites: RAD 261
This course provides an overview of image analysis and introduces methods of quality management. Topics include image evaluation, pathology, quality control, and quality assurance. Upon completion, students should be able to demonstrate a basic knowledge of image analysis and quality management.

RAD 251 RAD Clinical Ed IV (0 0 21 7)
Prerequisites: RAD 122 and RAD 131 and RAD 171; Corequisites: RAD 211 and RAD 231 and RAD 241
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further understanding of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 261 RAD Clinical Ed V (0 0 21 7)
Prerequisites: RAD 251; Corequisites: RAD 245
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 271 Radiography Capstone (0 3 0 1)
Prerequisites: RAD 211, RAD 231, RAD 241, RAD 251; Corequisites: RAD 245, RAD 261
This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level radiographer.

RED - READING

RED 070 Essential Reading Skills (3 2 0 4)
Prerequisites: None; Corequisites: None
This course is designed to strengthen reading skills. Emphasis is placed on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, and learning strategies. Upon completion, students should be able to demonstrate competence in the skills required for RED 080. This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.

RED 080 Intro to College Reading (3 2 0 4)
Prerequisites: RED 070 or ENG 075; Corequisites: 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 or ENG 111A.

RED 090 Improved College Reading (3 2 0 4)
Prerequisites: RED 080 or ENG 085; Corequisites: 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 or ENG 111A.

REL - RELIGION

REL 110 World Religions (3 0 0 3)
Prerequisites: RED 090; Corequisites: None
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 0 3)
Prerequisites: RED 090; Corequisites: 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  (3 0 0 3)
Prerequisites: RED 090; 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.

REL 221 Religion in America  (3 0 0 3)
Prerequisites: RED 090; Corequisites: None
This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

SCI - SCIENCE

SCI 110 Principles of Science  (3 2 0 4)
Prerequisites: None; Corequisites: None
This course introduces basic principles of chemistry, physics, and biology. Emphasis is placed on chemical reactions, energy forms, and ecological studies. Upon completion, students should be able to demonstrate mastery of the scientific method of thought and a basic understanding of chemistry, physics, and biology.

SEC - INFORMATION SYSTEMS SECURITY

SEC 110 Security Concepts  (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

SOC - SOCIOLOGY

SOC 210 Introduction to Sociology  (3 0 0 3)
Prerequisites: RED 090; Corequisites: None
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 social/behavioral sciences.

SOC 213 Sociology of the Family  (3 0 0 3)
Prerequisites: RED 090; Corequisites: 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.

SOC 220 Social Problems  (3 0 0 3)
Prerequisites: RED 090; 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  (3 0 0 3)
Prerequisites: RED 090; 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.
This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

SON 110 Intro to Sonography (1 3 3 3)
Prerequisites: None; Corequisites: None
This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

SON 111 Sonographic Physics (3 3 0 4)
Prerequisites: CVS 163 or SON 110; Corequisites: None
This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

SON 120 SON Clinical Ed I (0 0 15 5)
Prerequisites: SON 110; Corequisites: None
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 121 SON Clinical Ed II (0 0 15 5)
Prerequisites: SON 120; Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 130 Abdominal Sonography I (2 3 0 3)
Prerequisites: None; Corequisites: None
This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

SON 131 Abdominal Sonography II (1 3 0 2)
Prerequisites: SON 130; Corequisites: None
This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

SON 140 Gynecological Sonography (2 0 0 2)
Prerequisites: SON 110; Corequisites: None
This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

SON 222 Selected SON Clinical Ed (0 0 6 2)
Prerequisites: None; Corequisites: SON 110
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating selected sonographic examinations. Upon completion, students should be able to image, process, and evaluate selected sonographic examinations.

SON 220 SON Clinical Ed III (0 0 24 8)
Prerequisites: SON 121; Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 221 SON Clinical Ed IV (0 0 24 8)
Prerequisites: SON 220; Corequisites: None
This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 225 Case Studies (0 3 0 1)
Prerequisites: SON 110 or CVS 163; Corequisites: None
This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history,
laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.

SON 241 Obstetrical Sonography I (2 0 0 2)
Prerequisites: SON 110; Corequisites: None
This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.

SON 242 Obstetrical Sonography II (2 0 0 2)
Prerequisites: SON 241; Corequisites: None
This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.

SON 250 Vascular Sonography (1 3 0 2)
Prerequisites: SON 111; Corequisites: None
This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system.

SON 271 Doppler Sonography Topics (1 3 0 2)
Prerequisites: None; Corequisites: None
This course covers Doppler principles and instrumentation. Topics include basic Doppler principles, CW Doppler, pulsed-wave Doppler, color Doppler, and power Doppler. Upon completion, students should be able to demonstrate knowledge of Doppler principles and instrumentation.

SON 273 Adv Vascular Sonography (2 2 0 3)
Prerequisites: SON 250; Corequisites: None
This course covers advanced scanning techniques and pathological states. Emphasis is placed on identifying, recognizing, and imaging abnormal peripheral arterial, peripheral venous, and cerebrovascular conditions. Upon completion, students should be able to identify and image abnormal vascular conditions.

SON 274 Neurosonology (2 0 0 2)
Prerequisites: SON 110; Corequisites: None
This course covers the applications of sonography in neurology. Topics include neurological problems as documented by sonography. Upon completion, students should be able to demonstrate the techniques for documenting neurological anatomy and pathological conditions as seen on sonograms.

SON 289 Sonographic Topics (2 0 0 2)
Prerequisites: SON 110; Corequisites: None
This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

SPA - SPANISH

SPA 110 Introduction to Spanish (2 0 0 2)
Prerequisites: None; Corequisites: None
This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

SPA 111 Elementary Spanish I (3 0 0 3)
Prerequisites: None; 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 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 120 Spanish for the Workplace (3 0 0 3)
Prerequisites: None; Corequisites: None
This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should
be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

**SPA 141 Culture and Civilization (3 0 0 3)**
*Prerequisites: None; Corequisites: None*
This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SPA 161 Cultural Immersion (2 3 0 3)**
*Prerequisites: SPA 111; Corequisites: None*
This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SPA 181 Spanish Lab 1 (0 2 0 1)**
*Prerequisites: None; Corequisites: None*
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. 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 for transferability as a premajor and/or elective course requirement.

**SPA 182 Spanish Lab 2 (0 2 0 1)**
*Prerequisites: SPA 181; Corequisites: None*
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SPA 211 Intermediate Spanish I (3 0 0 3)**
*Prerequisites: SPA 112; Corequisites: 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 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.

**SPA 215 Spanish Phonetics/Structure (3 0 0 3)**
*Prerequisites: None; Corequisites: None*
This course is designed to improve the understanding of Spanish phonetics and the structure of the Spanish language. Topics include the structure of the Spanish language, phonology, morphology, and syntax. Upon completion, students should have an understanding of the phonetics and structure of the Spanish language and be able to contrast the structure of the Spanish and English languages.

**SPA 221 Spanish Conversation (3 0 0 3)**
*Prerequisites: SPA 212; Corequisites: None*
This course provides an opportunity for intensive communication in spoken Spanish. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SPA 231 Reading and Composition (3 0 0 3)**
*Prerequisites: SPA 212; Corequisites: None*
This course provides an opportunity for intensive reading and composition in Spanish. Emphasis is placed on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.
SPA 281 Spanish Lab 3 (0 2 0 1)
Prerequisites: SPA 182; Corequisites: None
This course provides an opportunity to enhance the 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 through the use of various supplementary learning media and materials. 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 for transferability as a premajor and/or elective course requirement.

SPA 282 Spanish Lab 4 (0 2 0 1)
Prerequisites: SPA 281; Corequisites: None
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. 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 for transferability as a premajor and/or elective course requirement.

**SPI - SPANISH INTERPRETER**

SPI 111 Cultural & Ethical Issues (3 0 0 3)
Prerequisites: None; Corequisites: None
This course provides cultural sensitivity instruction, as well as in-depth focus on professional ethics for the interpreter. Emphasis is placed on researching the fundamentals of professional ethics, creating ethical guidelines for interpreters and learning about Hispanic cultural issues. Upon completion, students should be able to apply professional ethics and an understanding of the Hispanic culture in the interpreting field.

SPI 113 Intro to Spanish Inter (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, employment opportunities, and working conditions. Topics include specialized jargon, code of ethics, interpreter assessments/qualifications, and protocol associated with various settings. Upon completion, students should be able to explain the rationale for placement of interpreters and apply ethical standards to a variety of working situations.

SPI 114 Ana Skills Spanish Inter (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is designed to improve cognitive processes associated with interpreting, listening, short-term memory, semantic equivalence, visual/auditory processing, thought organization and logic. Emphasis is placed on developing skills necessary to generate equivalent messages between Spanish and English. Upon completion, students should be able to consecutively interpret non-technical, interactive messages between Spanish and English.

SPI 213 Review of Grammar (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is designed to review the common elements of Spanish grammar in oral and written form. Emphasis is placed on the fundamental grammatical concepts of the Spanish language. Upon completion, students should be able to demonstrate comprehension and correct usage of specified grammatical concepts in both oral and written form.

SPI 214 Intro to Translation (3 0 0 3)
Prerequisites: None; Corequisites: None
This course is designed to improve the quality of Spanish to English and English to Spanish translation. Emphasis is placed on the practice of Spanish to English and English to Spanish translation in a variety of prose styles. Upon completion, students should be able to demonstrate the usage and understanding of the processes involved in translating.

SPI 221 Consecutive Interp I (3 0 0 3)
Prerequisites: None; Corequisites: None
This course introduces skills of consecutive interpretation used by professional interpreters. Topics include memory development, note taking, sight translation and non-verbal communication. Upon completion, students should be able to apply consecutive interpretation techniques in a variety of role-playing situations and settings.

SPI 224 Community Interpreting I (2 3 0 3)
Prerequisites: None; Corequisites: None
This course is designed to expose students to interpreting in areas such as social services, business and industry. Emphasis is placed on the development of social services, business and industry vocabulary through role-play. Upon completion, students should be able to consecutively interpret basic messages in a variety of social services, business and industry situations.

**TRF - TURFGRASS MANAGEMENT**

TRF 110 Intro Turfgrass Cult & ID (3 2 0 4)
Prerequisites: None; Corequisites: None
This course provides an in-depth study of turfgrass. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species through characteristics and reproductive stages and develop an establishment and maintenance plan for high quality turf areas.
**TRP - TRUCK DRIVER TRAINING**

**TRP 100 Truck Driver Training (6 18 0 12)**

*Prerequisites: None; Corequisites: None*

This course provides training in inspecting and driving tractor trailers and assuming driver responsibilities on the road and at pickup and delivery points. Emphasis is placed on defensive driving, federal motor carrier safety regulations, trip planning, cargo handling, vehicle systems, hours of service, and accident prevention. Upon completion, students should be able to demonstrate the skills required for the commercial driver’s license and employment. *This is a certificate-level course.*

**WEB - WEB TECHNOLOGIES**

**WEB 110 Internet/Web Fundamentals (2 2 0 3)**

*Prerequisites: None; Corequisites: None*

This course introduces basic markup language, various navigational tools and services of the Internet. Topics include creating web pages, using internet protocols, search engines, file compression/decompression, FTP, email, listservers, and other related topics. Upon completion, students should be able to deploy a website created with basic markup language, retrieve/decompress files, email, FTP, and utilize other internet tools.

**WEB 115 Web Markup and Scripting (2 2 0 3)**

*Prerequisites: None; Corequisites: None*

This course introduces client-side Internet programming using the current W3C-recommended presentation markup language and supporting elements. Topics include site management and development, markup elements, stylesheets, validation, accessibility, standards, browsers, and basic JavaScripting. Upon completion, students should be able to hand-code web pages with various media elements according to current markup standards and integrate them into websites.

**WEB 140 Web Development Tools (2 2 0 3)**

*Prerequisites: None; Corequisites: None*

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

**WEB 250 Database Driven Websites (2 2 0 3)**

*Prerequisites: DBA 110 and WEB 140; Corequisites: None*

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update, and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

**WLD - WELDING**

**WLD 110 Cutting Processes (1 3 0 2)**

*Prerequisites: None; 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 112 Basic Welding Processes (1 3 0 2)**

*Prerequisites: None; 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.

**WLD 115 SMAW (Stick) Plate (2 9 0 5)**

*Prerequisites: None; 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.

**WLD 116 SMAW (Stick) Plate/Pipe (1 9 0 4)**

*Prerequisites: WLD 115; Corequisites: None*

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

**WLD 121 GMAW (MIG) FCAW/Plate (2 6 0 4)**

*Prerequisites: None; 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 122 GMAW (MIG) Plate/pipe (1 6 0 3)**

*Prerequisites: WLD 121; Corequisites: None*

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.
WLD 131 GTAW (TIG) Plate (2 6 0 4)
Prerequisites: None; 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 (2 2 0 3)
Prerequisites: None; 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 151 Fabrication I (2 6 0 4)
Prerequisites: None; Corequisites: None
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD 212 Inert Gas Welding (1 3 0 2)
Prerequisites: None; Corequisites: None
This course introduces inert gas-shielded welding methods (MIG/TIG). Topics include correct selection of consumable and non-consumable electrodes, equipment setup, safety, and welding techniques. Upon completion, students should be able to perform inert gas welding in flat, horizontal, and overhead positions.
GENERAL INFORMATION

Continuing Education programs are offered where there is community need and interest. Some courses and services, because of great demand, are offered on a continuing basis. Other courses and programs may be initiated by request from groups, the industrial community, or other service organizations. The College, in keeping with its commitment to continuing education, cooperates with all groups whether public or private, industrial or service, whose goal is the development of continuing education for the citizens of Johnston County.

PHILOSOPHY

Johnston Community College is committed to a comprehensive Continuing Education program for all citizens in its service area. To fulfill this commitment, the College offers a variety of continuing education formed upon request when only three requirements are met:

1. sufficient number of students must enroll;
2. a qualified instructor must be available; and
3. a suitable location for the class must be acquired.

Through the Continuing Education program, citizens find opportunities to retrain and update themselves for today’s job market, develop leadership and civic responsibility, grow in basic knowledge, improve in home and community life, gain knowledge in general education, and develop creativity in the fine arts.

CONTINUING EDUCATION UNITS

Johnston Community College uses the Continuing Education Unit (CEU) as recognition and documentation for noncredit continuing education activities. The national guidelines for the use of the CEU are applied and emphasis is on the results of education and the assessment of those results. CEU’s are awarded for non-credit activities or programs meeting appropriate criteria. These CEU activities or programs may include:

- technical and professional courses
- in-service training programs
- courses for certificate or licensing requirements
- occupational skill upgrading courses
- liberal education programs
- paraprofessional training programs
- vocational training programs (either in-service or in preparation for job-entry positions)

One CEU is awarded for each 10 contact hours of instruction included in a specified continuing education program activity. Therefore, a normal one-week short course usually approximates 30 contact hours of participation and would be awarded 3.0 CEU’s. A two-day program seldom involves more than 10 or 12 contact hours and would thus be awarded 1.0 or 1.2 CEU’s respectively.

ENROLLMENT INFORMATION

Admission

Any person 18 years of age or older and not enrolled in public school may be admitted to a Continuing Education class. In extenuating circumstances, a person between the ages of 16 and 18 years of age may be admitted to a Continuing Education class.

The student must complete a Concurrent Enrollment form obtaining signatures of approval from appropriate school officials prior to enrollment.

Prior to the beginning of each semester, a course schedule is published and made available through the College Web site or to potential students upon request. Courses that begin between semesters are announced through local news media.
Registration

Because space may be limited for some classes, advanced registration is required for all Continuing Education courses with the exception of Basic Skills. Students must register at least FIVE CALENDAR DAYS prior to the class start date. Students may prepay registration fees in one of the following methods:

- Come by the Continuing Education Office in the Elsee Building between 8:00 a.m. and 3:00 p.m. on Monday – Thursday and on Fridays from 8:00 a.m. to 1:00 p.m. and complete the registration form along with payment.
- Complete the Continuing Education Registration form found in the Continuing Education Course Schedule and mail to the attention of the Continuing Education Division along with appropriate registration fee(s) to the address listed at the top of the form.
- Fax registrations paid with a credit card, either MasterCard or VISA, to the Attention: “Registration” at (919) 209-2189.

Visit the Web site at www.johnstoncc.edu and select “Continuing Education.” A link for the registration form is at the top of the page. This is a PRINT only form that may be mailed along with the appropriate registration fee or faxed.

Textbooks and Supplies

Students are responsible for purchasing their own supplies and/or text material as needed prior to class. These items are to be paid separately from registration fees. Any textbooks and/or course materials may be purchased during these times. Contact the Bookstore for inquiries about hours, books, or prices.

Attendance

Regular attendance and class participation are essential to effective teaching and learning. Adult students are expected to be regular and punctual in attendance. A minimum of 80 percent student attendance in each course is required to receive a certificate.

Fees

Occupational Extension courses offered through the Continuing Education Division carry registration fees as follows:

<table>
<thead>
<tr>
<th>Course length</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-24 hours</td>
<td>$65</td>
</tr>
<tr>
<td>25-50 hours</td>
<td>$120</td>
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<tr>
<td>51+ hours</td>
<td>$175</td>
</tr>
</tbody>
</table>

Technology fees for computer courses only are as follows and are not exempt:

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fee</th>
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</thead>
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<td>31 – 40</td>
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<td>41 and over</td>
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Self-supporting course fees vary and are dependent upon the length and nature of each course. Due to the nature of self-supporting courses, all students pay a registration fee.

Additional Fees

Some courses (e.g., computer, CNA, BioWork) may require the payment of a nominal technology or lab fee. Students will be notified of the fee prior to registration.

Fee Exemptions

Students who are fire department personnel, inmates, law enforcement officers, volunteer rescue squad personnel, and the students participating in Basic Skills programs are exempt from the registration fee. An exception would be self-supporting courses where ALL students must pay the registration fee.

Senior Citizens

Senior Citizens age 65 or older, who are qualified as legal residents of North Carolina, do not pay registration fees for up to 96 contact hours of occupational instruction per academic semester. This does not include self-supporting courses.

Refunds

A student who officially withdraws, in writing, from a Continuing Education course prior to the first class meeting is eligible for a 100-percent refund upon request to the Continuing Education Division. A student may be eligible to receive a 75-percent refund of the registration fee if the student officially withdraws (in writing) from the course after the class begins, but prior to the 10-percent census date. The technology fee is non-refundable after the class begins. A student would not be entitled to receive a refund if he or she withdraws after the 10-percent census date of the course.

Courses offered as self-supporting are not eligible for a refund as these programs are funded by registration fees collected. Students are eligible for a 100-percent refund if the classes are canceled by the College.

Course Repetition

A special provision of the State General Assembly concerning course repetition became effective July 1, 1993. Students taking an occupational extension course more than TWICE within a FIVE-YEAR period shall pay their cost for the course at a rate based on current contact hour value.
Students shall be primarily responsible for monitoring course repetitions; however, the College shall review records and charge students full cost for courses taken more than twice. Senior citizens who are legal residents of North Carolina and who wish to enroll in an occupational extension course will not be required to pay for taking the course twice. Senior citizens who take an occupational extension course more than TWICE within a FIVE-YEAR period shall pay their cost for the course. Students may repeat occupational extension courses an unlimited number of times if the repetitions are required for certification, licensure, or recertification.

**BASIC SKILLS PROGRAMS**

**Adult Basic Education**

Adult Basic Education offers persons 18 years of age or older the opportunity to develop essential reading, language, and math skills. The program is designed to help individuals better understand information and make decisions that affect their lives.

There is no cost to the individual for taking Adult Basic Education. All books and materials are supplied free of charge. Individual and small group instruction is offered in reading, writing, math, and life skills classes are scheduled during day and evening hours in convenient locations throughout Johnston County.

Students are encouraged to complete Adult Basic Education and then enter the Adult High School program or General Educational Development (GED) to earn an Adult High School Diploma or equivalency certificate or GED Diploma.

**English as a Second Language**

English as a Second Language is a program that provides instructional opportunities for adults with limited English proficiency. This program allows students to acquire skills in listening, speaking, reading, writing, and comprehension of the English language. The program provides instruction in a lab setting.

Classes are located throughout Johnston County during day and evening hours. There is no cost to the individual for taking English as a Second Language. All books and materials are supplied free of charge.

**Compensatory Education**

Compensatory Education is a program that provides continuing education opportunities for persons with intellectual disabilities. The focus of the program is to help individuals become as independent as possible through acquiring basic academic and life skills needed to function successfully in daily living.

Eligibility Criteria: To participate in the Compensatory Education Program, a student must be age 17 or older and (a) diagnosed with mental retardation or (b) functioning on a level equivalent to mental retardation resulting from head injury or brain damage.

There is no cost to the individual for taking this class. All books and materials are provided free of charge.

**Adult High School**

The Adult High School Diploma program, cosponsored by Johnston Community College and the Johnston County Board of Education, is designed to meet the needs of those adults who have not completed high school.

The student must complete 28 units of academic credit; however, credit is also given for courses that the student completed in the public school. Transcripts are evaluated to determine the course needs of each student.

Adult High School students who complete the 28 units of course work must also attain a passing score on the North Carolina Competency Test.

Upon successful completion of the program, students are awarded an Adult High School Diploma. This achievement is generally recognized as meeting educational requirements for employment or entrance into programs of higher education.

**General Educational Development**

The General Educational Development (GED) diploma program provides adults who have not completed high school with an opportunity to demonstrate the attainment of developed abilities normally acquired through completion of a high school program of study.

Classes are located throughout Johnston County during day and evening hours.

Successful completion of the GED test is recognized by award of the GED diploma by the North Carolina Community College System. This achievement is generally recognized as meeting educational requirements for employment or entrance into programs of higher education.

There is no cost to the individual for preparation classes. There is a fee of $7.50 to take the Official GED.

**HEALTH AND EMERGENCY SERVICES**

**In-Service Law Enforcement Training**

In-Service Law Enforcement Training is provided at the request of local law enforcement agencies. Courses are especially designed as in-service and pre-service education for those engaged in law enforcement activities. Workshops and courses are offered in many areas such as the following:

- PRISim Simulator Training
- Spanish for Law Enforcement
- Defensive Tactics
- Drugs and Narcotics
Investigations
• Firearms
• Mandated In-Service
• Officer Survival
• Radar Training
• SWAT
• Public Speaking
• Verbal Judo
• Detecting Deception

Fire Service Training
Fire Service Training is designed to provide firefighters the opportunity to gain technical information and skill in modern firefighting through a variety of learning experiences and practical problems. The College has a modern Fire/Rescue Training Ground on campus used extensively for local fire/rescue classes. Classes are often taken directly to the firefighters through training sessions held in local departments and training fields in the community. Among the courses are the following:

• Arson Detection
• Emergency Vehicle Operation
• Fire Apparatus Practices
• Firefighting Procedures
• Fire Officer Training
• Fire Stream Practices
• First Responder
• Flammable Liquids
• Forcible Entry
• Hazardous Materials
• Hose Practice
• Introduction to Firefighting
• L.P. Gas
• Ladder Practices
• Portable Fire Extinguishers
• Protective Breathing Equipment
• Rescue Practices
• Rope Practices
• Salvage and Overhaul Practices

Emergency Medical Services (EMS)
Training and Education
The EMS Education program offers courses designed to improve emergency health care to the public and serves as the American Heart Association Community Training Center. The program offers courses to all health care professionals current with the latest technology including:

• Advanced Cardiac Life Support (ACLS)
  – Provider and Instructor
• Pediatric Advanced Life Support (PALS)
  – Provider and Instructor
• Basic Cardiac Life Support (BCLS)
  – Provider and Instructor
• Pre-Hospital Trauma Life Support
  – Provider and Instructor Levels

Certification courses offered include:

• Emergency Medical Technician Basic, Intermediate, & Paramedic
• Continuing Education courses consistent with N.C. State requirements for providers in Johnston County

Nursing Assistant Training
Nursing assistant training is provided for individuals seeking employment in hospitals, doctor’s offices, nursing homes, and home health care. This program meets the state regulations for listing on the North Carolina Nurse Aide Registry. Registry is required for employment in North Carolina as a Certified Nurse Aide (CNA). This course entails classroom, laboratory, and clinical experiences in basic patient care. Most classes are 3-4 months in length.

Components of the Nursing Assistant program include the following:

• Nursing Assistant Level I Course
  Nursing Assistant Level I provides personal care training for nurse aides seeking employment in hospitals, nursing homes, doctor’s offices and home health agencies. This 160-hour course prepares the nurse aide to take the Certification Exam given by Pearson Vue. The class involves classroom, laboratory practice, and clinical experiences. Course times offered include: Mornings M, T, Th (8:30 a.m.–1:00 p.m.), Evenings T/Th (5:30 p.m.–10:00 p.m.) and also on a Sat/Sun (8:00 a.m.–5:00 p.m.) Upon passing the exam, the nurse aide will be listed on the N.C. Nurse Aide Registry. Contact the Director of Nursing Assistant and Allied Health Programs at (919) 209-2009 to place your name, address, and phone number on the next available waiting list for the schedule you select. Nurse Aide packets will be mailed to you once a seat is available. Costs: Registration: $199, Books: $75 estimated, Criminal Background $5/$25 Fee, + uniform. At the completion of the program, student will be provided a certificate, a testing handbook, and an application to mail with a $96 required fee to take the written/hands-on skill certification exam.

Prerequisites are: 1) A current CPR Card (pre-register with the Continuing Education Registrar in the Elsee Building on campus or call (919) 209-2168 about the CPR cost and registration requirements). See “Health and Emergency Services” section for further CPR course description); 2) High School Diploma, GED, or a Reading Test. (See Reading Assessment Evaluator located in the Continuing Education Division in the Elsee Building;  3) two matching name identifications - photo ID (driver’s license) and a government-issued card (Social Security card); and 4) sign a Consent Form at the time of Orientation/Registration to have a criminal background check performed prior to Clinical Rotation (fee required). Information on the state written and skills testing may be found at www.ncnar.org and click on “Testing information for Nurse Aides.”.
• Nurse Aide Refresher
This 30-hour nurse aide refresher course provides review and hands-on skills practice for those students with expired nurse aide certifications less than 5 years, and out-of-state nurse aids desiring to be listed on the N.C. Nurse Aide Registry. The course is taught during the day on 3 ½ Saturdays in the Spring/Fall. Requirements: 1) Copy of driver’s license; 2) Copy of Social Security Card; and 3) Copy of previous Nurse Aide listing or copy of certificate of previous Nurse Aide Training. This class is not designed to teach the entire Nurse aide Level I Course but is a review of previously learned skills and preparation for the Nurse Aide Certification Exam. Costs: Registration: $120, Skills Packet approximately $10 (JCC Bookstore). Students are to contact Nurse Aide Coordinator (919) 209-2009 to place your name, address, and number on the next class waiting list. A registration and schedule packet will be mailed to you requesting required documents.

• Nurse Aide II Certification
This 160-hour course meets the requirements of the North Carolina Board of Nursing for listing as Nurse Aide II Registry. Students will learn sterile techniques for wound care, tracheotomy care, catheter care, diabetic testing, oxygen therapy, and nutrition. Requirements include: 1) hold current, active listing on Nurse Aide I Registry with North Carolina, 2) current CPR card, and 3) high school diploma/GED; and 4) consent to criminal background checks (fee required). Registration is $199 and books $75 estimate; plus uniform. Day classes are held Tuesday and Thursday from 8:00am to 5:00pm and Friday and Saturday from 8:00-5:00 pm. Times/days subject to change.

• Medication Aide/RN Instructor Certification Course
This 16-hour course meets the requirements of the North Carolina Board of Nursing for listing on the Medication Aide Instructor Certification Registry, and is taught by a master teacher for RN Medication Aide Instructors. RN Requirements: 1) hold a current, active, unrestricted NC RN or compact state license and 2) have two years full-time current experience with medication administration. The eight-hour class is held on a Thursday and Friday after a minimum number of applications have been received. Registration is $65 with an additional cost for manuals and tool box. After completion of the course, the RN must apply to the Board of Nursing to be certified and renewed every two years at the time of the RN license renewal.

• Medication Aide – Student Course
This 24-hour program meets the requirements of the North Carolina Board of Nursing requirements for listing as a Medication Aide. Students who are Certified Nursing Assistants may work in skilled long-term care nursing facilities. (This program is not the same as Medication Technician.) Requirements: 1) high school diploma/GED and 2) a currently active nursing assistant. Registration is $65 and books $10. After completing the course, the student must apply to the North Carolina Board of Nursing for Listing on the Medication Aide Registry. Classes are held on evenings from 5:30 pm to 9:30 pm and Saturdays from 8:00-5:00 pm.

• Mammography Certification – Initial Training Course
Classes are held on campus in the radiology department two consecutive Saturdays and Sundays. This is a 28-hour approved certification course that provides initial training. Students will be required to perform mammography exams and training prior to applying for the ARRT exam. Registration is $120 and books are $60. Classes are held on two weekends from 9:00am to 5:00pm. Contact the coordinator at (919) 209-2009 for the next available class.

• Phlebotomy Technician
This 220-hour course prepares individuals to obtain blood and other specimens for lab analysis. Offered evenings 5:30-9:30 pm. Registration is $199, books $60, online background check is approximately $60+. Requires: Immunizations, High School Diploma or GED, CPR Certification, and clear criminal record. Contact Coordinator at 209-2009 to place your name on the waiting list.

COMMUNITY SERVICE/SELF SUPPORTING PROGRAMS

Johnston Community College promotes a number of Community Service/Self-Supporting courses providing quality avocational programs that are accessible and that provide comprehensive services for the community at large. Community Service/Self-Supporting courses are designed to meet the cultural, economic, and civic improvement of the community.

Courses are offered at the College campus and surrounding sites throughout the county. Courses and workshops are offered in various subject areas such as the following:

• Adult Piano Instruction
• Craft Classes
• Defensive Driving Programs
• Fine Art Classes
• Motorcycle Education
• Quilting Classes
• Sewing Classes
• Sign Language

COMPUTER TRAINING

Business Education Programs

Courses in business education are planned especially for adults who desire business education for personal or job-related purposes. Among the courses provided by the College are the following:
• Certificate Programs
• IT Academy Certification
• Individual Courses
• Online Courses
• Workshops
• Online Certificate Programs

Information Technology Academy Certification Training Programs (IT Academy)

Information technology training is a tool to get better job security. With the right certifications, it is possible to get a good paying job in the IT industry and with the right motivation, that job can turn into a career.

Course work for each training program consists of class lectures and hands-on experience with server and PC technology. Graduates should find employment as PC technicians, systems engineers, network administrators, and network technicians.

<table>
<thead>
<tr>
<th>Continuing Education Credit (CEU)</th>
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<tbody>
<tr>
<td><strong>PC Support Technician Training</strong> <em>4 Objectives</em></td>
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<tr>
<td>1. Computer TLA Essentials 72</td>
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<tr>
<td>2. 220-602: IT Technician 64</td>
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<td>3. 220-603: Remote Support and Technician 64</td>
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<td>4. 220-604: Depot Technician 64</td>
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<tr>
<td><strong>Network Security Specialist Training</strong> (2 track program)</td>
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<td>Network+ 72</td>
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<tr>
<td>Security+ 64</td>
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<tr>
<td><strong>Server+ Certification Training</strong> (1 track program) 72</td>
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<tr>
<td><strong>MCSA/MCSE Training</strong> (7 track program)</td>
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**MCSA Tracks**

70-270 Installing, Configuring, and Administering Microsoft Windows XP Professional 72
70-290 Managing and Maintaining a Microsoft Windows Server 2003 Environment 64
70-291 Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure 72
700-299 Implementing and Administering Security in a Microsoft Windows Server 2003 Network 64

**MSCE Tracks**

70-293 Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure 72
70-294 Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Director Infrastructure 64
70-297 Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure 64

**DISTANCE LEARNING PROGRAM**

The Continuing Education Division at Johnston Community College offers a Distance Learning program designed to improve employment opportunities and job related skills from your home or office. A complete listing of Internet courses is available on the College Web site. The following is an example of what is available:

- Accounting
- Art, History, Psychology, & Literature
- Basic Computer Literacy
- Business Administration Certification Prep
- Child Care and Parenting
- Computer Applications
- Courses for Teaching Professionals
- Database Management & Programming
- Digital Photography & Digital Video
- Entertainment Industry
- Grant Writing & Non-Profit Management
- Graphic Design
- Health Care, Nutrition, & Fitness
- The Internet
- Languages
- Law and Legal Careers
- Math, Philosophy, & Science
- PC Troubleshooting, Networking, & Security
- Personal Development
- Personal Enrichment
- Personal Finance & Wealth Building
- Sales & Marketing
- Start Your Own Business
- Test Prep
- Web and Computer Programming
- Web Graphics & Multimedia
- Web Page Design
- Writing and Publishing

**Computer Certificate Programs**

The following certificate programs are offered:

- AAA (Accelerated Administrative Applications) (day program)
- Office Computer Operations Specialist (night program)
- Digital Design Web Certificate Program (day program)
- Business Accounting Certificate Program (day program)
- Webmaster Certificate Program (online only program)
- Management (online only program)
- Medical Office (hybrid)

**Individual Computer Courses**

- Adobe Acrobat Standard
- AutoCAD
- Combo classes (Word and Excel, Word and Publisher, etc.)
- Computer Intermediate
- Computers for ESL Students
- Desktop Publishing
Johnston Community College provides economical workforce training to meet the needs of both the general population and local businesses, industries and organizations. Classes are designed to fit the organizational or individual needs of upgrading skills in the ever-changing workplace. Programs included in Business and Industry Services are Occupational Extension, BioPharma Education, Customized Training, Human Resource Development, WorkKeys and Career Readiness Certification, and the Small Business Center. The offices of these programs are located at the Johnston County Workforce Development Center in Clayton.

**OCCUPATIONAL EXTENSION COURSES**

Courses are designed to provide training that upgrades skills or retraining individuals for specific skill areas. Some of these skill areas include Industrial Maintenance, Welding, Automotive, Real Estate, Effective Teacher Training and Teacher Assistant Certificate Program. Other programs are designed to meet the continuing education requirements for specific areas such as Notary Public, Insurance, and Cosmetology. To meet the demands of the growing green industry, courses in green building and sustainable housing are also offered.

**BioPharma Education Programs**

All classes are continuing education courses and are held at the Johnston County Workforce Development Center.

**BioWork® Process Technician Training**

Students who complete this 136-hour course will gain the basic skills and general knowledge needed for entry-level process technicians in bioprocessing, pharmaceutical, and chemical manufacturing, as well as, participate in the human resources development aspect of the course. Course includes nine modules, including quality, measurements, transforming matter, growing living cells, safety, sterile processes, process control, and nuts and bolts. Job search strategies and tools, job market overview, resume preparation, and interview practice are incorporated into the course. Computer literacy, teamwork, time management, and problem solving are key components of this course.

**Advanced Bioprocessing Certificate**

Students who complete all 6 modules (64 hours) of this advanced certificate program will gain knowledge in advanced Bioprocessing practices, including safety in Biomanufacturing environments, advanced quality systems, applied chemical processes, monitoring process variables in Biomanufacturing, applied sterile processing, and applied cell culture, as derived from the Bioprocessing In The Workplace® curriculum. Advanced Bioprocessing Certificate Program will allow students to gain the necessary skills and knowledge needed for advanced process technician positions in Bioprocessing, Pharmaceutical, and Chemical Manufacturing.

**Aseptic Training Certificate**

This 60-hour training course prepares individuals to work as process technicians in aseptic pharmaceutical, Biomanufacturing and chemical manufacturing environments. The course encompasses gowned for aseptic environments, environmental monitoring, and product fill line operations. Computer literacy, teamwork, time management, problem solving, and situational applications are incorporated in the course.

**Pharmacy Assistant**

This 36-hour certification course covers an overview of working in a pharmacy environment. The coursework includes understanding the pharmacy team, knowing your essential skills and responsibilities as a pharmacy assistant, understanding pharmacology basics, learning about generic, trade, and chemical names of drugs commonly prescribed, understanding and filling the prescription, managing inventory, and understanding potential safety hazards when working with medicine. Class includes a rotation at a local pharmacy.

**Customized Training**

The Customized Training program supports the economic development efforts of the State by providing education and training opportunities for eligible businesses and industries to remain productive, profitable, and within the State. The program was developed in recognition of the fact that one of the most important factors for a business or industry considering locating, expanding, or remaining in North Carolina is the ability of the State to ensure the presence of a well-trained workforce. The program is designed to react quickly to the needs of businesses and to respect the confidential nature of proprietary processes and information within those businesses.

**Purpose**
The purpose of the Customized Training program is to provide customized training assistance in support of full-time production and direct customer service positions created in the State of North Carolina, thereby enhancing the growth potential of companies located in the state while simultaneously preparing North Carolina’s workforce with the skills essential to successful employment in emerging industries.

Eligibility
Those businesses and industries eligible for support through the Customized Training program include Manufacturing, Technology Intensive (i.e., Information Technology, Life Sciences), Regional or National Warehousing and Distribution Centers, Customer Support Centers, Air Courier Services, National Headquarters with operations outside North Carolina, and Civil Service employees providing technical support to US military installations located in North Carolina.

In order to receive assistance, eligible businesses and industries must demonstrate two or more of the following criteria:

- The business is making an appreciable capital investment;
- The business is deploying new technology;
- The business is creating jobs, expanding an existing workforce, or enhancing the productivity and profitability of the operations within the State; and,
- The skills of the workers will be enhanced by the assistance.

Resources may support training assessment, instructional design, instructional costs, and training delivery for personnel involved in the direct production of goods and services. Production and technology support positions are also eligible for training support.

Full-time probationary employees of qualified Customized Training companies are eligible for training delivered by the community college.

The use of Customized Training funds requires that trainees are paid by the company for all time during training hours.

Human Resources Development
The Human Resources Development (HRD) program provides skill assessment services, employability skills training, and career development counseling to underemployed and unemployed adults. The program offers courses that address the following core components:

- assessment of an individual’s assets and limitations
- development of a positive self-concept
- development of employability skills
- development of communication skills
- development of problem-solving skills
- awareness of the impact of information technology in the workplace

Specialized classes are offered that introduce career pathways in such areas as bioprocessing, banking, customer service, health care, and computer technology.

The HRD program is an Occupational Extension program which carries the same registration fees as Occupational Extension courses, however, these HRD courses may be offered at no cost provided the following criteria is met:

- currently unemployed
- received notice pending layoff
- eligible for Federal Earned Income Tax Credit
- working and earn wages at or below 200 percent of the federal poverty guidelines

North Carolina Career Readiness Certificate
ACT’s Workkeys® assessments are used to award the Career Readiness Certificate (CRC). The CRC is a portable credential that workers can use in any area of North Carolina or in any state in the U.S. The CRC identifies three core workplace skill areas required in multiple industries and occupations throughout the U.S. They are:

- Reading for Information
- Locating Information
- Applied Mathematics

Success in these areas, indicates that a candidate is “job ready.”

Small Business Assistance Center
The Small Business Assistance Center at Johnston Community College is one of 58 centers throughout North Carolina that supports the development of new businesses and the growth of existing businesses by being a community-based provider of training, counseling, and resource information.

Resource information is maintained at the Workforce Development Center with class schedule information at the Cleveland Center, and the Elsee Building on the main campus of the college. The director’s office is located at the Workforce Development Center. The Resource Center has books, videos, tapes, handouts, and periodicals for the person interested in small business topics. There is a computer available for writing and researching business plans and proposals. The director of the Center is ready to assist by offering confidential counseling sessions. No question is too simple or too complicated. As a member of the Small Business Center Network, the director has many resources available for referrals in assisting the entrepreneur with specialized problems. There is no charge for counseling, referrals, and the use of the resource center.

Training is offered on business related topics in the form of seminars, workshops, and short courses at all three locations. Most of the offerings are at no charge. The Center works in partnership with the chambers of commerce in Johnston County to bring seminars to all areas of the county on a regular basis. The popular “lunch” series has afforded many small business persons the opportunity to hear about timely topics without spending a lot of money.

The Center is working in partnership with the chambers to deliver the Johnston County Leadership Program on an annual
basis. The class meets monthly from September through May of each year and includes a retreat and leadership skill classes as well as informational sessions on the county. It is designed to identify opportunities for exerting leadership by the participants in their communities.

Each year the Small Business Assistance Center offers a small business development series that is free of charge to participants and provides instruction in the following topics:

- How to Start a Business
- How to Write a Business Plan
- Financing a Business
- Marketing and Advertising Your Business
- Record Keeping and Taxes for the Small Business

Information on each of the topics is available in the WDC Resource Center, the Cleveland Center, and the Elsee Building and is accessible from the College’s Web site at www.johnstoncc.edu/smallbusinesscenter.aspx or by calling the director.
MEMBERS, BOARD OF TRUSTEES

The current members of the Board of Trustees, as of fall 2009, are listed below:

Lyn Austin
Chair
Robert W. Bryant Jr.
Vice Chair

Governor Appointments

Lyn Austin  Current Term Expires 2012  Clayton
Robert W. Bryant Jr.  Current Term Expires 2010  Selma
April Culver  Current Term Expires 2009  Smithfield
Haywood A. Watson  Current Term Expires 2011  Kenly

County Commission Appointments

Ann Game  Current Term Expires 2012  Clayton
Dr. Phyllis Ethridge  Current Term Expires 2011  Smithfield
John G. Hatch  Current Term Expires 2013  Four Oaks
Cookie Pope  Current Term Expires 2010  Smithfield

Board of Education Appointments

James Narron  Current Term Expires 2011  Smithfield
Douglas V. Oglesby  Current Term Expires 2009  Benson
Eldridge T. Westbrook  Current Term Expires 2012  Four Oaks
Durwood Woodall  Current Term Expires 2012  Smithfield

Student Representative

Appointed by Student Government Association

Thomas Currier  Current Term Expires 2010  Clayton

COLLEGE ADMINISTRATIVE OFFICES

Administrative Services

Arboretum Director  Lin Frye
Bookstore Manager  GeAnne Pope
Controller  Art Andrews
Housekeeping and Grounds Supervisor  Randy Hopper
Howell Woods Director  James Sasser
Human Resources Director  Tonya Jackson
Maintenance Director  Michael Massey
Performing Arts Director  Ken Mitchell
Printing Services  Sue Jackson
Purchasing and Equipment Officer  Doug Pate
Safety Officer  Sherrill Dale

College Foundation

Executive Director  Tywla Wells
Special Events and Donor Relations Manager  Judy Miller

Continuing Education

Basic Skills Chair  Pam Earp
Business and Industry Services Chair/Workforce Development Center Director  Joy Callahan
Community Services/Self-Supporting Chair  Kim Gamlin
Health and Emergency Services Chair  Susan Crisp

Curriculum Programs

Arts and Sciences Chair  Louise Deaton
Applied/Industrial Technology Chair  Michael Starling
Academic Enrichment Services Chair  Dawn Dixon
Business Technologies Chair, Interim  Michael Spragins
Health Sciences Chair  Linda Smith

Information Technology

Instructional Technology and Distance Education Center Coordinator  Terri S. Lee
Library Services Director  Christine Roberts
Network Services Director  Harald Mury

Institutional Advancement and Effectiveness

Grants Director  Antowanna Blount
Institutional Effectiveness and Professional Development Director  Donna Shumate
Media Relations & Public Information Officer  Traci Ashley
Publications and Advertising Manager  Fonda Hughes
Web Services and Online Marketing Director  Eric Schmieder

Student Services

Admissions and Counseling Director  Joan McLendon
Financial Aid Director  Betty Woodall
Global Education and Outreach Coordinator  Heather Murphy
JobLink Career Center Director  Robert Davis
Registrar  Deena Henry
Student Activities/Athletics Director  Derek Kelly
Student Recruitment Coordinator  Maria Lynch
Student Support Services - TRIO Director  Carrol Warren
**COLLEGE ADMINISTRATIVE OFFICERS**

**DAVID N. JOHNSON**  
President. B.M.Ed., Campbell University; M.Div., Southeastern Baptist Theological Seminary; Ed.D., North Carolina State University

**DEE DEE DAUGHTRY**  
Interim Vice President of Curriculum Instruction. A.A.S., Wayne Community College; B.S., Mount Olive College; M.B.A., Campbell University. Additional study, Nova Southeastern University.

**PAMELA J. HARRELL**  
Vice President of Student Services. B.A., University of North Carolina at Chapel Hill; M.A., East Carolina University; Ed.D., North Carolina State University.

**HERMAN KIGHT**  
Vice President of Administrative Services. B.S., M.B.A., East Carolina University.

**TALBERT MYERS**  
Vice President of Continuing Education. B.S., M.S., North Carolina Central University. Additional study, Appalachian State University, North Carolina State University.

**DALE O’NEILL**  
Vice President of Institutional Advancement and Effectiveness. B.A., Atlantic Christian College; M.A., North Carolina State University.

**FACULTY AND STAFF**

Listed below are all full-time faculty and full-time and part-time established staff.

**SUSAN M. ADAMS**  
Mathematics Instructor. B.S., M.Ed., North Carolina State University.

**KIM ALLEN**  
Administrative Assistant to Vice President of Student Services. A.A.S., Johnston Community College.

**VICKY A. ALLEN**  
Associate Degree Nursing Instructor. B.S.N., East Carolina University. Additional Study, Indiana Wesleyan University.

**LARRY T. ANDERSON**  
Truck Driver Training Instructor. North Carolina Truck Driver Training School.

**ART ANDREWS**  
Controller. B.S.B.A., Appalachian State University; M.B.A., Baker College; Certified Public Accountant. Additional study, Appalachian State University.

**ROSA S. ANDREWS**  
Director, Small Business and Occupational Licensure Programs. B.S., Francis Marion University; M.A.Ed., Concordia University.

**STEPHEN ASHBY**  

**TRACI D. ASHLEY**  
Media Relations and Public Information Officer. B.A., University of North Carolina at Chapel Hill. Additional study, East Carolina University.

**SUSAN AUSTIN**  
Instructor, Academic Enrichment Services. B.S., M.A., East Carolina University.

**NAHEL AWADALLAH**  
Biology Instructor. B.S., M.S., Long Island University.

**DEBORAH H. AYCOCK**  
Director of Nursing Assistant and Allied Health Programs. A.A.S., A.A.S., Johnston Community College; B.S.N., Barton College.

**BARBARA A. BAKER**  
Housekeeping. A.A.S., Johnston Community College.

**ELIZABETH D. BAKER**  

**JESSICA BANKS**  
Box Office Assistant.

**HARRIETT BARBOUR**  
Director, Child Development Center. B.S., University of Tennessee.

**LINDA BARBOUR**  
Associate Degree Nursing Instructor. Diploma, Wilson Memorial Hospital School of Nursing; B.S.N., University of North Carolina at Chapel Hill.

**PERRY BARBOUR**  

**TAMMY BARBOUR**  
Developmental Studies Instructor. B.S., Campbell University; Wachovia Partnership East.

**TINA BARBOUR**  
Housekeeping.

**LYNN BARKER**  
Biology Instructor. B.S., B.A., University of North Carolina at Wilmington; M.S., North Carolina State University.

**CLAUDE E. BARNES**  
Housekeeping.

**APRIL MINETTE BASS**  
Library Specialist. A.A.S., Johnston Community College; B.S., Mount Olive College.
APRIL BATTEN  
Administrative Assistant to Vice President of Continuing Education. A.A.S., Johnston Community College. Additional study, Mount Olive College.

DEBBIE BATTEN  

STEPHANIE E. BEASLEY  
Radiography Instructor. A.A.S., Johnston Community College; B.S., M.S., University of St. Francis. RT (ARRT) (M) (CT)Registered.

PHILIP M. BEAUMONT  

ANTOWANNA C. BLOUNT  
Grants Director. B.S., Shaw University. Additional study, Keller Graduate School of Management, Strayer University.

CODY BOGDANOWITZ  
Groundskeeper.

MARCIE BOOKER  
Compensatory Education Instructor. B.S., Miami University.

RANDY BOST  
Maintenance.

ELLEN BOYD  
Developmental Studies Instructor. B.S., Campbell University. Wachovia Partnership East.

SHAUN W. BRASWELL  
Events Coordinator, Paul A. Johnston Auditorium.

SANDRA W. BRINCHEK  
Purchasing Technician. A.A.S., Johnston Community College.

DEREK BROWN  

FLORA STREET BRUNDAGE  
Counselor/Early Intervention. B.S., North Carolina Agricultural and Technical State University; M.A., New York University. Additional study, Cornell University.

JAXIE BRYAN  
Librarian. B.A., B.S., M.L.S., Appalachian State University.

MISTY H. BRYANT  

SHERMAN BRYANT  

GRACIELLA BRYMAN  
Basic Skills Instructor. A.A.S., Kingsborough Community College. Additional study, Johnston Community College and Educational Studies at WGU.

DONNELL BULLOCK  
Truck Driver Training Instructor. North Carolina Truck Driver Training School. Additional study, Vocational Instruction Program Training, Wayne County Schools.

BONNIE J. CAPPS  
Receptionist.

STEPHANIE CAPPS  
English Instructor. B.A., Atlantic Christian College; M.A., East Carolina University.

JOHNNY CARMICHAEL  
Assistant Registrar. A.A.S., Johnston Community College.

JOY T. CALLAHAN  
Department Chair, Business & Industry/Director, Johnston County Workforce Development Center. A.A., Peace College; B.S., M.Ed., East Carolina University.

BARBARA CARTER  
Medical Imaging Clinical Instructor. A.A.S., Johnston Community College; B.S., Mount Olive College. RT (ARRT) Registered.

FRANK CASANOVA  
Program Director, Computer and Office Studies. B.A., Methodist College; M.A., Webster University.

KRISTY F. CASEY  
Assistant Registrar. A.A., Louisburg College; B.S., Appalachian State University.

A. CHRISTOPHER CHAPPELL JR.  
DEBRA W. CLARKSON
Academic Skills Center Assistant. A.A.S., Johnston Community College; B.S., Barton College; M.Ed., East Carolina University.

REBECCA CLARY
Continuing Education Secretary. A.A.S., Johnston Community College. Additional Study, Fayetteville State University.

ROBERT COLEMAN III
Network Services Technician. A.A.S., Virginia Western Community College.

WENDY A. COLLINS
Clinical Director, Radiography. A.A.S., Johnston Community College; B.S., North Carolina State University. RT (ARRT) Registered.

EDWARD SCOTT CREECH
Accounting Instructor. B.B.A., M.B.A., Campbell University. Additional study, North Carolina State University, Nova Southeastern University.

SUSAN CRISP
Department Chair, Health and Emergency Services. B.S., Western Carolina University; M.Ed., North Carolina State University. Additional study, North Carolina State University.

HOPE DALE

SHERILL DALE
Maintenance/Safety Officer. Johnston Community College.

SUSAN BLAIR DANIELS
Child Development Center Teacher. B.S., Mount Olive College.

MINDA DAUGHTRY
Gardner/Landscaper. A.A.S., A.A.S., Johnston Community College; B.S., Barton College.

Marilyn Davenport
JobsNow Biowork Coordinator and Instructor. B.S., Biomedical Science, Texas A & M University; M.S., Veterinary Parasitology/Microbiology, Texas A & M University.

GEORGE DAVIS
Housekeeping.

RAMONDA DAVIS-CARter
Distance Learning Technician. A.A.S., Johnston Community College.

ROBERT GLEN DAVIS, JR.
Maintenance.

CHARLES DAWES
Housekeeping.

WALTER T. DAWSON
Electrical/Electronics Technology Instructor. A.A.S., Wayne Community College; B.S., East Carolina University.

DAWN M. DAY
Associate Degree Nursing Instructor. B.S.N., Spring Arbor University. M.S.N., Indiana Wesleyan University.

THOMAS DEAN
Counselor/Distance Education, Advisor to Ambassadors. B.S., M.S., East Carolina University. Licensed Professional Counselor, National Certified Counselor, Distance Credential Counselor.

LOUISE DEATON
Department Chair, Arts & Sciences. B.A., University of North Carolina at Wilmington; M.Ed., Campbell University.

DENNIS DE JONG
Music Program Coordinator/Instructor. B.M., Rice University; M.M., Duquesne University.

DAWN DIXON
Department Chair, Academic Enrichment Services. B.A., Simmons College; M.Ed., Northern Arizona University.

ROBERT DIXON
Maintenance.

TOVOYA DOBBIN
Secretary, Medical Imaging & Biology. A.A.S., Johnston Community College; B.S., Mount Olive College.

DIANA DOUGLAS
Instructor/Faculty Coordinator, Early Childhood Education. B.A. Ed.; M.A.Ed., Western Governors University.

CARI J. DREW
Counselor. B.S., North Carolina State University; M.A., Campbell University.

KEVIN N. DRIVER

MONICA DUNNEHOO

PAMELA J. EARp
Department Chair, Basic Skills. A.A.S., Johnston Community College; B.S., Barton College; M.Ed., North Carolina State University. Additional study, North Carolina State University.
DORIS EDWARDS  
Secretary, Basic Skills. A.A.S., Johnston Community College.

EVA EFIRD  
Psychology Instructor. B.S., University of South Carolina; M.A., East Carolina University.

ADEMOLA EJIRE  
Biology Instructor. B.S., Saint Augustine’s College; M.S., Ph.D., North Carolina State University.

DEBBIE ELAM  
Associate Director, Performing Arts. B.M., Meredith College.

MONA ELLINGTON  

KAREN ELLIS  
Lead Instructor, Compensatory Education. B.S., East Carolina University.

RHONDA B. EVANS  
Director, Medical Assisting. A.A.S., Pitt Community College. CMA Registered, 1997.

MARLENA EVERETT  
Counselor/Career and Transfer Coordinator; Adjunct Instructor/Academic Enrichment Services. B.S., East Carolina University; M.A., North Carolina State University.

MONTY FAVRET  
Program Director, Biotechnology. B.S., Western Carolina University; M.S., Virginia Polytechnic Institute and State University.

AMY L. FEASTER  
Director of Nursing Education. B.S.N., Lycoming College; M.S.N., College Misericordia.

LAURA FLEWELLING  
Psychology Instructor. B.S., Methodist College; M.S., Walden University.

ABE FLORES  
Network Engineer. A.A.S., Johnston Community College; B.S., East Carolina University.

NANCY D. FLOWERS  
Secretary, College Foundation. A.A.S., Johnston Community College.

LIN FRYE  
Director, Arboretum and Landscape Gardening Program. B.S., College of Charleston; M.S., University of North Carolina at Chapel Hill.

TIMOTHY GALLOWAY  
Cosmetology Instructor. Diploma, Brunswick Community College. Licensed Cosmetologist, North Carolina State Board of Cosmetic Art Teacher’s License.

KIMBERLY WIGGS GAMLIN  
Department Chair, Community Services/Self-Supporting Programs. A.A., Wayne Community College; B.A., University of North Carolina at Wilmington; M.Ed., North Carolina State University. Additional study, East Carolina University.

LEAH GARNER  
Critical Care Coordinator. R.N., B.S.N, Western Carolina University.

TARA GERMONTO  
Assistant Director, Child Development Center. B.S., Campbell University.

BEVERLY M. GIBSON  
Administrative Assistant to the President. A.A.S., Johnston Community College.

AMANDA GILSON  
Huskins Latent Evidence Instructor. B.S., Baylor University.

JOSEPHINE GODFREY  
Housekeeping, Workforce Development Center.

CATHY GODWIN  
Director, Sonography Programs. A.A.S., Johnston Community College; B.S., Mount Olive College. ARRT Registered, RDMS Registered (AB, OB, NE), RVT Registered, RDCT Registered (AE). M.Ed., North Carolina State University.

JASON GODWIN  
Director, Law Enforcement Training. B.S., M.S., East Carolina University.

GWENDOLYN CAPPNS GREEN  
Assistant Controller. A.A., Peace College; B.S., Mount Olive College; M.B.A., Baker College.

WILLIAM GREGORY  
Graphic Arts/Fine Arts Instructor. B.F.A., East Carolina University; M.F.A., University of Montana.

SHARON GRIFFIN  
Secretary, Financial Aid. A.A.S., Johnston Community College; B.S., Mount Olive College.

FRANK GRUBBS  

ALAN A. GRUVER  
Basic Skills Instructor. B.S. Arizona State University

KRISTIE GURLEY  
Human Resource Assistant.

BRANDON GURLEY  

GEORGE LEE HARE  
Groundskeeper.
ANTHONY J. HARRIS
Director, Nuclear Medicine Technology Program. A.A.S., B.S., Ferris State College. NMTCB certified.

BRENDA HARRIS
Registration Specialist/Cashier, Continuing Education. A.A.S., Johnston Community College.

DAVID HARRIS
Network Services Technician. A.A.S., Johnston Community College.

HEIDI HARRIS
WorkKeys Coordinator. B.A., University of North Carolina at Chapel Hill; Teaching License, East Carolina University.

DEWANA J. HARTLEY
Computer Technology Instructor. A.A.S., Johnston Community College: B.S., Mount Olive College; M.S., East Carolina University. MCSA/MCSE Certification.

DEENA H. HENRY
Registrar. A.A.S., Johnston Community College; B.S.B.E., East Carolina University.

DARRYL HEUSER
Chemistry Instructor. B.A. SUNY College at Buffalo; M.A. SUNY College at Buffalo.

TERRI HILL
Secretary, Arts and Sciences Faculty. A.A.S., Johnston Community College.

LAUREE P. HOLLIDAY
Director, Pharmacy Technology Program. A.B., Meredith College; M.S., Virginia Polytechnic Institute & State University; Pharm.D., University of North Carolina at Chapel Hill.

RICKIE HOLLOMAN
Housekeeping, Workforce Development Center.

RANDY HOPPER
Director, Grounds and Housekeeping. A.A.S., Wayne Community College.

DAVID HORVATH

JENNIFER HORVATH
Spanish Instructor. B.S., B.A., State University of New York College at Oneonta; B.S., M.Ed., Binghamton University.

THOMAS R. HOWERTON JR.
English Instructor. B.A., North Carolina State University; M.A., Ph.D., University of North Carolina at Chapel Hill.

EDWARD F. HOY
Basic Skills Instructor. B.A., Saint Leo University. Additional study, University of Virginia.

MILTON S. HUDSON JR.
Air Conditioning, Heating and Refrigeration Instructor. A.A.S., Diploma, Fayetteville Community College. H-3 Class I State License, North Carolina Board of Plumbing, Heating and Fire Sprinkler Contractors; State License, North Carolina Board of Refrigeration Examiners.

TRACI NUNN HUDSON

FONDA HUGHES
Manager, Advertising and Publications. A.A.S., Johnston Community College.

DANIELLE HUSSEY
Project SkillUp Assistant. B.A., Dominican College of Blauvelt, New York.

CHRISTINA IRVINE
English Instructor. B.A., Lafayette College; M.A., University of North Carolina at Wilmington.

LESLIE ISENHOUR
Director, BioPharma Programs. B.S., Campbell University. Additional study, North Carolina State University.

ANN JACKSON
Director, Radiography Program. A.A.S., Johnston Community College: B.S., Mount Olive College; RT (ARRT) Registered; M.B.A., University of Phoenix.

JAMES W. JACKSON
Business Instructor. B.S.B.S., M.B.A., Campbell University.

MARGARET JACKSON
Secretary to Vice President of Institutional Advancement and Effectiveness. B.S., Appalachian State University.

SUE JACKSON

TONYA P. JACKSON
Director, Human Resources. B.S., Mount Olive College.

MICHAEL J. JACOBS

RAYMOND JAKLITSCH
Coordinator, Cleveland Center. B.A., Greensboro College; M.Ed., Virginia State University. Additional study, University of North Carolina at Greensboro.
SHELVIA JEFFERSON
Coordinator/Instructor, Academic Enrichment Services.
A.A.S., Johnston Community College; B.S., Mount Olive College. Additional study, East Carolina University.

BILL JOHNSON
Basic Skills Instructor. A.B., Pfeiffer College. Additional study, North Carolina State University.

CARRIE JOHNSON

CINDY M. JOHNSON
Veteran Affairs Coordinator/Financial Aid Specialist. A.A.S., Johnston Community College.

GREG A. JOHNSON
Biology Instructor. B.S., Michigan State University; M.S., Eastern Michigan University; M.A., University of Michigan.

JOHN W. JOHNSON
Food Service, JCPU.

MATTHEW JOHNSON

SABRINA JOHNSON
Instructor, Early Childhood Education. B.S., UNC Greensboro; M.Ed., Strayer University.

SHERYL JOHNSON
Instructor, Academic Enrichment Services. B.S., Baptist Bible College.

DAVID S. JONES
Receiving Technician. A.A.S., Johnston Community College.

GREG JONES

JAMES JONES
Housekeeping.

RUBIE JONES
Compensatory Education Instructor. B.S., Columbia State University; M.Div., Southeastern Baptist Theological Seminary; D.Div., Southeastern Baptist Theological Seminary.

PAUL R. JUMP JR.
Program Director, Truck Driver Training Program.

A.J. KAY
Heating, Air Conditioning and Refrigeration Instructor. A.A.S., Lenoir Community College; Diploma, Guilford Technical Community College, North Carolina Class I H-3 North Carolina License.

BARRY KEITH
Biology Instructor. B.S., M.L.S., North Carolina State University.

DEREK KELLY
Director of Student Activities/Athletics. A.A.S., A.A., Edgecombe Community College.

MAXTON KIRBY
Director, Prison Programs/Office Systems Technology Instructor. A.A.S., Johnston Community College; B.S., Mount Olive College.

GLORIA JEAN KUTSCHEID

ANNETTE LANGSTON
Cosmetology Instructor. Diploma, Johnston Community College. Licensed Cosmetologist, North Carolina State Board of Cosmetic Art Teacher’s License.

LINDA LANGSTON
Housekeeping.

CYNTHIA LASSITER-PHILLIPS
Secretary, Continuing Education. A.A.S., Johnston Community College; B.S., Mount Olive College.

SHARRON R. LATTA
Associate Degree Nursing Instructor. B.S.N., University of North Carolina Chapel Hill; M.S.N., University of Phoenix.

JOHN LEE
Philosophy Instructor. B.S., Christopher Newport University; M.A., University of Montana.

JUDY S. LEE
Administrative Assistant to Vice President of Administrative Services. A.A.S., Johnston Community College.

TERRI S. LEE
Director, Instructional Technology and Distance Education Center. B.A., University of North Carolina at Chapel Hill; M.L.I.S., University of North Carolina at Greensboro. Additional study, North Carolina State University.

THERESA C. LEE
Admissions Coordinator. A.A.S., Johnston Community College.

LINDA LEVY
Basic Skills Instructor. B.S., San Francisco State University. Additional study, Appalachian State University.

NANCY LEWIS
Librarian. B.A., Saint Thomas University; M.L.I.S., Certificate, University of South Carolina.

ALEXANDRE LOCK
Advertising and Graphic Design Instructor. B.S., North Carolina State University; M.F.A., Boston University.

LANNETTA R. LOCKHART
Assessment and Placement Coordinator. A.A., Johnston Community College; B.B.A., Campbell University.
HENRY L. LOWERY

MARIA LYNCH
Coordinator, Student Recruitment. B.A., North Carolina State University.

DONALD RAY MADISON
Truck Driver Training Instructor.

CIARA MARABLE

THOMAS C. MARTIN
Business Instructor. A.A.S., Johnston Community College; B.S.B.A., M.B.A., Fayetteville State University. Additional study, University of Phoenix.

TONTA MASSENGILL
Payroll Specialist. A.A.S., Johnston Community College; B.S., Mount Olive College.

MICHAEL MASSEY
Director, Maintenance. A.A.S. Johnston Community College

DOUGLAS CLINT MATTHEWS
Library Clerk. A.A., Johnston Community College; B.S., Campbell University.

WILLIAM M. MAY
Truck Driver Training Instructor. North Carolina Truck Driver Training School.

JOCELEEN MCCALL
Religion Instructor. B.S., Fayetteville State University; M.Div., Duke University.

KENNETH (Vic) MCCORMICK JR.
Assistant System Administrator. B.S., North Carolina Central University. Additional study, Strayer University.

THADDEUS D. MCCRAE
Housekeeping.

KATRINA MCDougald
Administrative Assistant/Environmental Education, Howell Woods. A.A.S., Davidson Community College; B.S. North Carolina State University.

CINDY MCLAMB

AMELIA MCLEOD
Johnston Community College Early College Academy Liaison. B.S., East Carolina University; M.A., East Carolina University; PhD. North Carolina State University.

JOAN S. MCLENDON
Director, Admissions and Counseling. B.S., University of North Carolina at Greensboro; M.S.Ed., Youngstown State University.

DELLA MCMILLIAN

PATRICIA MCNAMARA
Spanish Instructor. B.S., San Marcos University; M.A., Michigan State University.

SANDRA B. MILLARD

GORDON MILLER
Truck Driver Training Instructor. B.S., University of Pittsburg, North Carolina Truck Driver Training School.

JUDY C. MILLER
Manager, Special Events and Donor Relations. Diploma, Sheffield School of Interior Design. Additional study, Johnston Community College.

CLIFF MITCHELL
History Instructor. B.S., University of North Carolina at Chapel Hill; M.B.A., Appalachian State University; M.A., University of North Carolina at Greensboro.

KEN H. MITCHELL JR.
Director, Performing Arts. Certificate, New York University; B.A., University of North Carolina at Wilmington; M.S.A., Central Michigan University.

MARK MITCHELL
Psychology Instructor. B.A., M.A., East Carolina University.

ANGELA MOORE
System Administrator. A.A.S., Johnston Community College; B.S., East Carolina University.

CYNTHIA MOORE
Huskins Latent Evidence Instructor. A.A.S., Johnston Community College; B.S., M.S., East Carolina University.

GEORGE CLIFTON MOORE

LASHAY MOORING
Admissions Coordinator. A.A.S., Johnston Community College. Additional study, Barton College.

MARK MORRIS
SHERRI MORRIS  

TRAVIS MULLHAUSER  
English Instructor. B.S., University of Central Michigan; M.F.A., University of North Carolina at Greensboro.

HEATHER MURPHY  
Coordinator of Global Education and Outreach. B.S., University of Texas at Austin.

HARALD E. G. MURY  
Director, Network Services. A.A.S., Community College of the Air Force; B.S., Columbus College; M.S., Troy State University.

ANDY NARRON  
JOBSNOW CNA Instructor/Coordinator. A.A.S., Johnston Community College.

TOMMY NEAL JR.  
Housekeeping.

CRYSTAL NETTER  

SHARON NEVILLE  
Secretary, Workforce Development Center. A.A.S., Century Community College.

MELISSA NEWSOME  
Clinical Coordinator. Johnston Community College.

DAVID OLIVER  
Computer Networking Technology. B.S., Campbell University.

DAVID OWENS  
Housekeeping.

JACKIE PAGE  
Records and Registration Specialist. A.A.S., Johnston Community College.

AMANDA PARKER  
Secretary, Applied Industrial Technology. B.S., Gardner-Webb University.

AMBER PARKER  
Manager, Media Services. A.A.S., Johnston Community College; B.S., M.S., East Carolina University.

COREY PARKER  
Research Analyst. A.A.S., Johnston Community College; B.S., East Carolina University. Additional study, Strayer University.

JASON PARKER  

DEBORAH PARNELL  
Associate Degree Nursing Instructor. A.D.N., Johnston Community College; B.S.N., University of North Carolina at Chapel Hill; M.S.N., Old Dominion University.

SHERRY PARNELL  
Bookstore Assistant.

TERRY PARNELL  
Program Director, Cosmetology. Diploma, Hank Hanna Beauty College. Licensed Cosmetologist, North Carolina State Board of Cosmet Art Teacher’s License.

PAULA PARRISH  
Director of Continuing Education Computer Applications and Distance Learning. A.A.S., Johnston Community College; B.S., Mount Olive College.

MAJOR DOUGLAS PATE  
Purchasing and Equipment Coordinator. A.A.S., Johnston Community College.

D. BRENDA PEEDIN  
Tutor Coordinator, Student Support Services (TRIO). A.A.S., Johnston Community College.

ARIS PENNINGTON  

ANTHONY A. PENNY  
IT Academy Instructor. A.A.S., Johnston Community College; MCSA/MCSE Certification; A+, Network+, Server+, Security+ Certification.

STEVEN PENNY  
Medical Sonography Instructor. A.A.S., Johnston Community College; B.S., Mount Olive College. ARRT Registered, RDMS Registered (AB, OB, NE).

BILLY PHILLIPS  

JEFFREY PICKERING  
System Administrator. A.A.S., Moraine Valley Community College. B.S., East Carolina University.

GEANNE POPE  
Bookstore Manager. B.S., Fayetteville State University.

PRISCILLA PREVETTE  
Director, Early Childhood Education. B.S., M.A.E., East Carolina University.

RODNEY PRICE  
Clinical Coordinator, Interventional Cardiac and Vascular Radiography. A.A.S., Johnston Community College; RT, (R) (CV) (CT) (ARRT) Registered; B.S., Mount Olive College.
JOSEPH PRIDGEN
Coordinator, Minority Male Mentoring Program. B.A., Shaw University; M.Div., Payne Theological Seminary.

RICHARD RAVERT
Network Services Technician. B.S., Mount Olive College. Additional study, Strayer University.

LETITIA Rawlinson
Director, Human Resource Development. B.S., Wayland University. Additional study, Strayer University.

CAROLYN REA
Director, Center for Academic Planning. B.A., M.A., Edinboro University.

DEEANNE W. REAVES
Administrative Assistant to Vice President of Curriculum Instruction. A.A.S., Johnston Community College.

NANCY RENFROW
Radiography Instructor. A.A.S., Johnston Community College, RT (ARRT) (M) Registered; B.S., University of St. Francis.

SONIA A. RHODES
Secretary, Business Technology Faculty. A.A.S., Johnston Community College.

TUWANDA RICHARDSON
Program Assistant, Student Support Services. A.A.S., Johnston Community College.

JESSICA RIEGER
Lead Instructor, Community Spanish Interpreter. B.S., B.A., Appalachian State University. M.ED., University of Phoenix. Doctoral candidate, University of Phoenix.

JANE KIRKLEN ROBBINS
Public Speaking Communications Instructor. B.A., Texas Tech University; M.A., California State University, Los Angeles.

CARLA ROBERTS
Coordinator, In-Service Law Enforcement Training. A.A.S., Louisburg College.

CHRISTINE B. ROBERTS
Library Director. B.A., University of South Carolina; M.L.S., North Carolina Central University.

JERRY ROSE
Office Systems Technology. B.S., East Carolina University. Additional study, North Carolina State University, Johnston Community College.

MIKE ROSE
Operations Technician, Howell Woods.

WILLIAM R. SANDERS III
Systems Programmer. B.S., North Carolina State University.

JAMES SASSER
Director, Howell Woods Environmental Center. B.S., North Carolina State University.

MARTHA B. SAUNDERS
Secretary, Early Childhood. A.A.S., Johnston Community College.

ERIC SCHMIEDER
Director of Web Services and Online Marketing. B.S.B.A., M.E., Western Carolina University. Additional study, Indiana State University.

JACKIE SEARE
Director, Occupational Extension Programs. B.S., North Carolina Wesleyan; M.Ed., N.C. State University.

ROBERT E. SELF
Audiovisual Specialist. B.A., Lenior-Rhyne College.

JONATHAN SHEARIN
Media Production Specialist, Paul A. Johnston Auditorium. B.S., Appalachian State University.

SHERRI CLAYTON SHEARS
Compensatory Education Instructor. B.A., Shaw University.

DONNA SHUMATE
Director of Institutional Effectiveness and Professional Development Activities. A.A.S., Community College of the Air Force; B.S., Southern Illinois University; M.Ed., Ed.D., North Carolina State University. Additional study, East Carolina University.

PEGGY SKINNER
Office Administration Instructor. B.S., M.A.Ed., East Carolina University.

AMY SMATHERS
Huskins Latent Evidence Instructor. B.S., Illinois State University.

AMY SMITH
Child Development Center Teacher. A.A.S., Wake Technical Community College. Additional study, Mount Olive College.

LINDA D. SMITH
Department Chair, Health Sciences. B.S.N., Boston College; M.S.N., Armstrong Atlantic State University. Additional study, East Carolina University.

NATALIE C. SMITH
Radiography Instructor. A.A.S., Johnston Community College; B.S., Mount Olive College. RT (ARRT) (M) Registered.

KRISTA SMITH
Box Office Assistant.

STEVEN A. SMITH
SJETV Programming Coordinator. A.A., Miami-Dade Junior College; Diploma, Brown Institute of Broadcasting.
JOEL SPEARS  
Computer Science Instructor. B.S., M.S., University of Tennessee at Knoxville. Additional study, North Carolina State University.

I. DANETT SPEIGHT  
Associate Degree Nursing Instructor. B.S.N., M.S.N., University of North Carolina at Greensboro.

J. MICHAEL SPRAGINS  
Interim Department Chair, Business Technology. B.S., Wake Forest University; J.D., Drake University.

SHARON STALLS  
Distance Learning Specialist. A.A.S., A.A.S., Wilson Technical Community College.

LISA STANLEY  
Housekeeping.

MARTY STANLEY  
Maintenance.

MICHAEL STARLING  
Department Chair, Applied Industrial Technology. B.S., East Carolina University. Additional study, East Carolina University and North Carolina State University.

DONNA STEPHENSON  

MICK STEWART  
Paramedic Instructor. B.A., The University of North Carolina at Chapel Hill.

JEAN STOWERS  
Medical Office Administration Instructor. B.S., Mount Olive College. Additional study, East Carolina University. CPC (Certified Professional Coder), American Academy of Professional Coders.

JON STRICKLAND  
Mathematics Instructor. B.S., North Carolina State University; M.Ed., Campbell University.

SHERRILL STRICKLAND  
Groundskeeper.

JIMMIE F. SUMEREL  
Interim Program Director for Business Programs. B.S.B.A., B.A., M.B.A., Western Carolina University.

ANDREA SUTTON  

ROBERT THOMAS  
Evening Receptionist. B.S., Old Dominion University.

PATSY H. THOMPSON  
Radiography Instructor. A.A.S., Johnston Community College; B.A.S., Mount Olive College. RT (ARRT) (M) Registered.

R. GREG THOMPSON  
Physical Education Instructor. B.S., East Carolina University. Additional study, United States Sports Academy.

SHARON THOMPSON  
Director, Therapeutic Massage. Diploma, Gaston College; Diploma, Medical Arts Massage School; Diploma, Academy of Lymphatic Studies; A.A.S., University of the State of New York.

RACHEL TICE  
Secretary, Health Care Technology. A.A.S., A.A.S., Johnston Community College.

TOM TIGHE  
Chemistry Instructor. B.A., Oakland University; M.S., Wayne State University; M.S.M., North Carolina State University.

NANCY TURLINGTON  
English Instructor. B.S., M.A., East Carolina University. Additional study, Campbell University, North Carolina Central University.

ARNOLD D. TURNER  
Maintenance Mechanic. Diploma, Johnston Community College.

CHANDRA VANCE  

JULIE WALKER  

LARRY M. WALKER  
Basic Skills Instructor. A.A., B.A., Saint Leo University; A.A., Coastal Carolina University; A.A.S., Community College of the Air Force; M.A., Webster University; M.P.A., Golden Gate University; M.A., Southeastern Baptist Theological Seminary.

CARROL A. WARREN  
Director, Student Support Services (TRIO). B.A., Meredith College; M.Ed., University of Texas at Austin. Additional study, North Carolina State University. Certified Rehabilitation Counselor.

HOPE WARREN  

WENDY WEAVER  
Radiography Instructor. A.A.S., Johnston Community College; B.S., Mount Olive College. RT (ARRT) (M) Registered.
STARR WEBSTER
Assistant to the Fire Director. A.S., Fire Science Technology, Pike’s Peak Community College.

MIECHAL J. WEINER
Basic Skills Instructor. B.A., University of North Carolina at Chapel Hill; B.A., Teachers Certificate, North Carolina Central University.

SHANE WELLS

TWYLA CASEY WELLS
Executive Director, College Foundation. B.M., North Carolina School of the Arts; Certificate, Duke University; M.Ed., North Carolina State University. Additional study, North Carolina State University.

REX WEST
Truck Driver Training Instructor. North Carolina Truck Driver Training School.

TINA W. WHICHARD
Accounts Payable Specialist. A.A.S., Johnston Community College.

SANDRA WHITE
Associate Degree Nursing Instructor. A.D.N., Johnston Community College; B.S.N., Atlantic Christian College; M.S.Ed., Capella University.

KENNETH WILEY
Network Services Technician. B.S., Southern Illinois University at Carbondale.

DALE WILLIAMS
Digital Electronic Repair Instructor. A.A.S., Johnston Community College.

KELLY WILLIAMS
Health, Physical Education Instructor. B.S., East Carolina University; M.S., Florida State University.

NATASHA WILLIAMS
Accounts Payable/Accounts Receivable. B.B.A., Campbell University.

SHERWOOD WILLIAMS

TARYN WILLIAMS
English Instructor. B.A., M.A., North Carolina State University. Additional study, North Carolina State University, Duke University

JENNIFER WILLIFORD

CHRISTINA W. WILSON
Admissions Coordinator. A.A.S., Johnston Community College.

MARTY S. WOOD

BETTY C. WOODALL
Financial Aid Director. A.A.S., Johnston Community College; B.S., Barton College.

BILL WOODALL
Mathematics Instructor. B.A., Campbell University; M.A., East Carolina University.

CHRISTOPHER D. WOODARD
Groundskeeper. A.A.S., Sampson Community College.

B. MICHELLE WOODIE
Director, Interventional Cardiac and Vascular Radiography. A.A.S., Wake Technical Community College; RT, (R) (ARRT) Registered, B.S., Mount Olive College. Additional study, North Carolina State University.
MAP OF MAIN CAMPUS

LEGEND

A – Elsee Building
B – Arts Building
C – Wilson Building
D – Tart Building/Paul A. Johnston Auditorium
E – College Library (future site)
F – Health Sciences Building
G – Smith Building
H – Britt Building
I – Transport Technology Building
J – Public Safety Services Complex
K – Sports/Recreation Complex
L – Arboretum Complex
M – Sanders Maintenance Building
N – Lakeside Greenhouse