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The catalog is the official announcement of the College calendar, programs, requirements, and regulations of Northwest-Shoals Community College, hereinafter referred to as the College. Students enrolling in the College are subject to the provisions stated herein. Statements regarding procedures, policies, the calendar, courses, fees, and conditions are subject to change without advance notice.

Every effort is made to insure that courses and programs described in this catalog are offered to students in an appropriate and reasonable sequence. Students should be aware, however, that admission to the College or registration for a given semester does not guarantee the availability of a specific course. Course availability is determined by student demand and instructor availability.
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Accreditation
Northwest-Shoals Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the Associate in Arts, Associate in Science, Associate in Applied Science and Associate in Occupational Technology degrees as well as certificates in specific occupational areas. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404.679.4500 for questions about the accreditation of Northwest-Shoals Community College.

Nondiscrimination Policy
It is the official policy of the Alabama Department of Postsecondary Education and Northwest-Shoals Community College that no person in Alabama shall on the grounds of race, color, disability, sex, religion, creed, national origin, or age, be excluded from participation, be denied the benefits of, or be subjected to discrimination under any program, activity, or employment. The College complies with nondiscriminatory regulations under Title VI and Title VII of the Civil Rights Act of 1964; Title IX Education Amendment of 1972; Section 504 of the Rehabilitation Act of 1973; and the Americans with Disabilities Act (ADA) of 1990.

Women and members of minority groups are encouraged to participate in college activities.

The College is committed to a Drug Free learning and work environment through education, intervention, and enforcement.

Members of The Alabama State Board of Education
Northwest-Shoals Community College is a part of the Alabama College System under the control of The State Board of Education.

Governor Robert Bentley, President

Dr. Mark Heinrich, Chancellor

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Calendar 2015-2016
All dates are tentative and subject to change. Check the NW-SCC website for changes.

**Fall Semester 2015**
- August 13.................Professional Development
- August 14..................Last Day of Regular Registration Period
- August 17..................Faculty Preparation Day
- August 18...........Full Term and First-Mini Term Classes Begin
- August 20..................Last Day of Add/Drop Period
- September 7...........Labor Day - State Holiday
- October 9..................First Mini-Term Ends
- October 12..............Second Mini-Term Begins
- November 1..............Vetran's Day - State Holiday
- November 23-24........ACCA Professional Development
- November 26-27........Thanksgiving - State Holidays
- December 2.............Last Day to Withdraw from Full and Second Mini-Term with a grade of “W”
- December 9.............Full and Second Mini-Term Ends
- December 10-11, 14-16.......Final Exams
- December 17...........Grades Due by 9:00 a.m.
  Faculty Duty Day/Student Holiday
- December 18-January 1.....Holidays - College Closed

**Summer Term 2016**
- May 26..................Last Day of Regular Registration Period
- May 27..................Faculty Preparation Day
- May 30..................Memorial Day - State Holiday
- May 31...........Full Term and First Mini-Term Classes Begin
- June 2..................Last Day of Add/Drop Period
- June 6..................Eight Week Term Begins
- June 30..................First Mini-Term Ends
- July 1..................Second Mini-Term Begins
- July 4..................Independence Day - State Holiday
- July 21.............Last Day to withdraw from Eight Week Term with a grade of “W”
- July 26.............Last Day to withdraw from Full and Second Mini-Term with a grade of “W”
- July 28.............Eight Week Term Ends
- August 2.............Full and Second Mini-Term Ends
- August 3-5, 8-9............Final Exams
- August 10...........Grades Due by 9:00 a.m./Faculty Duty Day
- August 11.............Faculty Duty Day

**Spring Semester 2016**
- January 4..................Professional Development
- January 5.............Last Day of Regular Registration Period
- January 6..................Faculty Preparation Day
- January 7...........Full Term and First Mini-Term Classes Begin
- January 11.............Last Day of Add/Drop Period
- January 18.............Dr. Martin Luther King, Jr. Birthday
  State Holiday
- March 1.................First Mini-Term Ends
- March 2..................Second Mini-Term Begins
- March 28-April 1........Spring Break
- April 4..................Classes Resume
- April 25.............Last Day to withdraw from Full and Second Mini-Term with a grade of “W”
- May 2..............Full and Second Mini-Term Ends
- May 3-6, 9.............Final Exams
- May 10...........Grades Due by 9:00 a.m./Faculty Duty Day
- May 11...............Faculty Duty Day
- May 12...............Commencement/Graduation
  Shoals Campus & Phil Campbell Campus
**Institutional Mission**

Northwest-Shoals Community College provides vocational, technical, academic and lifelong educational opportunities; promotes economic growth; and enhances the quality of life for the people of Northwest Alabama.

**Institutional Philosophy and Goals**

The College is dedicated to the belief that all people should have an equal opportunity to develop and expand their skills and knowledge throughout their lives. The College promotes this concept by making higher education available to all who can benefit through its open door admission policy, affordable tuition, and a wide variety of financial aid opportunities. The College is committed to seeking out members of diverse groups and providing an educational environment where opportunities for successful advancement will be available to those who have historically been underserved. Instruction is delivered in various formats on campus and at convenient off-campus locations throughout the College’s service area.

The College offers educational programs and services which enable students to achieve their potential, to better understand themselves and others, to seek continued higher education, to gain applied technology skills required for employment or career growth, and to improve their quality of life. Through its programs and services, the College contributes to the quality of life in the community, supports economic development in the region, reinforces the concept of learning as a lifelong pursuit, and grows and improves within a framework of continuous planning, resources development, and sound financial management.

Educational opportunities provided by the College include courses for transfer, associate degrees, applied technology program certificates, continuing education, training programs, and developmental studies. Working in partnership with area universities, businesses, and industries, the College endeavors to support economic development and to keep the curriculum current. The College develops services and programs which provide relevance to students as well as opportunities in the world of work and in higher academic pursuits.

Eligible high school students may attend the College and receive credit for college work. College credits and continuing education are available to those requiring college courses for promotion and professional certification. The College provides a convenient schedule of course offerings to address the self-interest and self-improvement needs of community residents.

The College recognizes the need to provide student support services. Professional counselors help students succeed and manage their lives and careers through financial aid, counseling, job placement, personal and academic advisement. In addition, extra-curricular activities expand and enrich student experiences at the College.

The College provides an environment that is conducive to learning, easily accessible, and accommodating to students with a variety of needs. This is accomplished through appropriately furnished and well maintained physical facilities, classroom equipment, and grounds. The College provides resources to the community and makes its facilities, services, and activities available to non-students when feasible.

**Goal 1**

To ensure access to education for all people throughout their lives with special efforts made to seek diversity of population and to support the historically underserved;

**Goal 2**

To continuously improve the quality of our varied educational offerings which lead to certificates, associate degrees, transfer to baccalaureate institutions, the general educational development of students, and immediate employment in an occupational field;

To continuously improve the quality of our varied educational offerings, the College strives to meet the following general educational outcomes.

1. Students will demonstrate proficiency in written communication.
2. Students will demonstrate proficiency in oral communication.
3. Students will demonstrate proficiency in problem-solving skills.

These outcomes are used to assess the general education competencies for all graduates.

**Goal 3**

To build community partnerships which support economic development, keep the curriculum current, and strengthen for students the bridge to higher education and the world of work;

**Goal 4**

To meet the needs of a variety of community based populations by designing credit, non-credit courses, and CEU courses, offering flexible schedules and convenient instructional sites, and by making available services, activities, and other resources of the College;

**Goal 5**

To offer support services and extracurricular activities which enrich the student learning experience and help students in formulating and achieving their goals;

**Goal 6**

To establish an environment which is safe, healthy, aesthetically pleasing, accessible to students, and otherwise conducive to learning;

**Goal 7**

To develop faculty and staff who are competent, professional, and enthusiastic in advancing the mission of the College; and

**Goal 8**

To become a model of institutional effectiveness and advancement through decision-making based on research, planning and on-going assessment, and through budgeting and distributing funds which are adequate and equitable.
History of the College

Northwest-Shoals Community College is a comprehensive two-year public institution of higher learning providing vocational, technical, academic and lifelong educational opportunities for the northwest Alabama Region. The College is part of the Alabama College System, a statewide system of postsecondary colleges, governed by the Alabama Board of Education. Northwest-Shoals derives its original charter from the Alabama legislature through the Alabama Trade School and Junior College Authority Act of 1963.

The Northwest-Shoals service area is comprised of the counties of Colbert, Franklin, Lauderdale, Lawrence and the western portion of Winston. The College operates two campuses – the Shoals Campus in Muscle Shoals and the Phil Campbell Campus in Phil Campbell.

The Phil Campbell Campus was founded in 1963 as Northwest Alabama State Junior College to provide access to postsecondary education for citizens of the rural counties of northwest Alabama. It was the first public junior college in what was to become the Alabama College System and was accredited by the Commission on Colleges of the Southern Association of Colleges and Schools in 1967. The Shoals Campus, founded in 1966 as Joe Wheeler State Trade School, provided occupational and technical training.

Both institutions recognized that the narrowness of their focus did not meet their constituents’ educational needs. In 1973 Muscle Shoals State Technical Institute enhanced its curriculum and obtained accreditation from the Commission on Occupational Education Institutions. In 1977, with the approval of the Alabama State Board of Education, Northwest Alabama State Junior College established a branch campus in Tuscumbia primarily to offer first and second-year college courses.

In 1989 the Alabama State Board of Education created Northwest Alabama Community College through the consolidation of Northwest Alabama State Junior College in Phil Campbell and Northwest Alabama State Technical College in Hamilton. Shoals Community College was created through consolidating Muscle Shoals State Technical College and the Tuscumbia Campus of Northwest Alabama State Junior College. The Commission on Colleges of the Southern Association of Colleges and Schools granted accreditation to Northwest Alabama Community College in 1990. Shoals Community College received its accreditation in 1991.

Northwest-Shoals Community College was formed in 1993 by the Alabama State Board of Education through the merger of Northwest Alabama Community College’s Phil Campbell Campus and Shoals Community College. The merger was enacted in order to provide more effective and efficient educational services to residents of rural northwest Alabama and the Shoals area.

Additionally, the merger provided business and industry with a single focal point for addressing educational and training needs and provided a single workforce development center to assist communities with economic development activities. The merger was reviewed and approved by the Commission on Colleges of the Southern Association of Colleges and Schools. Reaffirmation of accreditation was granted by SACSCOC in December, 2009. Northwest-Shoals Community College, composed of two campuses, has adequate physical facilities to support an environment in which academic, social, physical, and emotional development may be fostered. The two campuses are located in Muscle Shoals and Phil Campbell. The campus in Muscle Shoals is designated as the Shoals Campus.

College Campuses

Phil Campbell Campus

The Phil Campbell Campus is located approximately 30 miles south of the Shoals campus. It is easily accessible from either U.S. Highway 43 or Alabama Highway 5/AL Hwy 13. Located on a scenic 100-acre site one mile southwest of the town of Phil Campbell, the campus provides academic and applied technology programs and a full complement of student and community services. The Bevill Fine Arts Center is among the premier cultural centers in northwest Alabama and the home of numerous concerts, musicals and special events for both the College and local communities.

Shoals Campus

The 110-acre Shoals Campus houses academic and applied technology programs. The Patriot Center, a multipurpose facility, offers the largest seating capacity in Colbert County. Tennis courts and a fitness center provide opportunities for both intramural athletics and wellness activities for the student body and the community. A child development center with a qualified staff to care for children is available to students and the community. Also housed on the Shoals Campus are allied health programs, science labs, special programs such as adult basic education, and the Alabama Technology Network’s Environmental Technology Center.

Grants and Contracts

In all cases of external grants and contracts, Northwest-Shoals Community College will maintain full control of instructional and other institutional activities. The College assures that any external grant or contract shall comply with the overall mission of the institution and that the College will comply with all pertinent state and federal regulations, legislation, and procedures. The College shall in no way compromise its commitment to maintain legal and ethical administrative practices as well as accreditation standards.

Commitment to Institutional Integrity

Northwest-Shoals Community College complies with the Alabama Ethics Commission’s advisory opinions concerning private consulting that may be conducted by full-time employees. The Chancellor’s guidelines in regard to “conflict of interest” issues require the approval of the President, Vice President, Deans and Department or Division Chairperson for outside, compensated consulting activities.
Admission to the College
the regional office of the Office for Civil Rights of the U.S. Department of Education with 180 days of the act, and/or the Equal Employment Opportunity Commission within 180 days of the decision issued by the institution. The College

The mission of student recruitment is to help make the general public and prospective students aware of the College’s many programs which are available to help each individual meet his or her needs. The College is committed to seeking out members of diverse groups and providing an educational environment where opportunities for successful advancement will be available to those who have historically been underserved.

The College representatives provide information to prospective students by working with community and non-traditional groups, visiting high schools, selected clubs and agencies, minority groups, retirees and other citizens in the College service area.

Contact recruitment personnel to arrange for campus tours or visits to area high schools or other community events: Shoals 256.331.5333, Phil Campbell 256.331.6261 or the College’s Recruitment Manager, Lindsey Oliver at 256.331.6239.

**Admission Process**

Northwest-Shoals Community College has an open-door admissions policy for all U.S. Citizens and eligible Non-Citizens that provides higher education for individuals who meet minimum admission requirements as set forth by the policies of the Alabama Community College system. The College does not discriminate on the basis of race, color, age, sex, disability or national origin. However, the College reserves the right to individually review any applicant for admission based on whether a particular applicant’s admission would be prejudicial to the general welfare of the College.

Applications for admission may be submitted electronically via the MyNWSCC portal found on the Northwest-Shoals website or mailed to the Admissions Office on either the Muscle Shoals or Phil Campbell Campus. Applicants must also submit an unexpired, government-issued photo ID before an application will be considered. Documents may be presented in person, mailed, or a legible copy may be submitted electronically. Admission to the College does not mean acceptance or admission to certain health education programs in the College such as Nursing, Practical Nursing, Emergency Medical Services, or Medical Assisting Technology which may have additional standards for admission and progression. Applicants should refer to the program descriptions in this Catalog and/or contact the specific program director/chairperson for additional information. Any and all elements of admission requirements are subject to change without prior notice.

**Admission Policies – Degree Seeking Students**

1. **Primary Form of Identification**

   For admission to an Alabama Community College System institution, an applicant must provide one primary form of identification such as an unexpired state-issued driver license; an unexpired state-issued identification card; an unexpired U.S. passport; an unexpired U.S. permanent resident card. An applicant who fails to satisfy the College. Applicants should submit the identification referenced above in person or by submitting a legible copy by mail or via electronic submission.

2. **Non-Citizens of the United States**

Northwest-Shoals Community College has an open-door admissions policy for all U.S. citizens and eligible Non-Citizens. Applicants who possess permanent resident status or deferred action status for childhood arrivals will be admitted to the college after completing an admission application and submitting required documentation. Permanent residents should provide an unexpired U.S. permanent resident card. Applicants who have granted deferred action status must present Form I-797 that specifically states that the applicant has been granted deferred action status, along with an unexpired state-issued driver’s license or an unexpired state-issued identification card.

**First-Time Student**

A student who has not previously attended any college after graduation from high school/GED is considered a first-time freshman.

Required Admission Documentation:

- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Official high school/GED transcript documenting graduation

**Transfer Student**

A student who has previously attended any college after graduation from high school/GED is considered a transfer student.

Required Admission Documentation:

- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Official high school/GED transcript documenting graduation
- Official college transcript from all previously attended institutions

*Students who have achieved a minimum of a baccalaureate degree are only required to submit a transcript from the granting institution for admission to the college but may need to submit other transcripts for evaluation of transfer of credit.

**Initial Academic Status of a Transfer Student**

- **Clear Academic Status:** A transfer student whose cumulative grade point average at the transfer college(s) is 2.0 or above on a 4.0 scale will be admitted on CLEAR academic status.
- **Academic Probation:** A transfer student whose cumulative grade point average at the transfer college(s) is less than 2.0 on a 4.0 scale will be admitted only on ACADEMIC PROBATION. The applicant's transcript will read ADMITTED ON ACADEMIC PROBATION.
- **Suspension:** An applicant who has been academically suspended at another accredited postsecondary college may be admitted as a transfer student only upon appeal to the Admissions Committee of the
the identification requirement will not be admitted to
Admission to the College

General Principles for Transfer of Credit

1. Coursework transferred or accepted for credit toward an undergraduate program must represent collegiate coursework relevant to the formal award with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution’s own undergraduate formal award programs. In assessing and documenting equivalent learning and qualified faculty, the institution may use recognized guides which aid in the evaluation for credit. Such guides include those published by the American Council on Education, The American Association of Collegiate Registrars and Admissions Officers, and the National Association of Foreign Student Affairs.

2. Courses successfully completed in compliance with required standards at other regionally accredited postsecondary institutions will be accepted for transfer as potentially creditable toward graduation requirements.

3. A transfer student from a collegiate institution not accredited by the appropriate regional association may request an evaluation of transfer credits after completing 15 semester hours with a cumulative GPA of 2.0 or above at Northwest-Shoals Community College.

4. A transfer grade of “D” will be accepted only when the transfer student’s cumulative transfer GPA is 2.0 or above. If the student has a cumulative transfer 2.0 or above, the grade of “D” will be accepted the same as that for native students.

5. Transfer credit for graduation will be granted based on the applicability of transfer courses to the requirements of the degree pursued. All transfer students must complete at least 25 percent (25%) of degree requirements at the College in order to receive a degree.

6. Credit may be extended based on a comprehensive evaluation of demonstrated and documented competencies and previous formal training.

7. Transfer credit for graduation will be granted based on the applicability of transfer courses to the requirements of the degree pursued. All transfer students must complete at least 25 percent (25%) of degree requirements at the College in order to receive a degree. Students who are admitted to the College on probation must complete 50 percent (50%) of degree requirements at the College in order to receive a degree.

Returning Northwest-Shoals Student (Readmission)

A student who has previously attended Northwest-Shoals as a credit student (after high school/GED) and is returning to Northwest-Shoals after a break in continuous enrollment is considered a returning (readmit) student excluding the summer semester. Students who only attended Northwest-Shoals as a dual enrollment student should apply as a first-time freshman if he or she plans to attend Northwest-Shoals after high school graduation.

Required Admission Documentation:

- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Official high school/GED transcript documenting graduation
- Official college transcripts from all previously attended institutions after last attending Northwest-Shoals

*Students who have achieved a minimum of a baccalaureate degree are only required to submit a transcript from the granting institution for admission to the college but may need to submit other transcripts for evaluation of transfer of credit.

Transient Student

An applicant who is currently enrolled at another postsecondary college and seeks credit that will transfer back to his/her primary college is classified as a transient student.

Required Admission Documentation:

- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Transient letter from primary college listing approved courses

*Transient students are considered non-degree seeking and are not eligible for federal financial aid.

High School Accelerated (Early Admission) Student

This program is available to qualified high school students who have completed required high school prerequisites. Accelerated students receive college credit but not high school credit. High school approval is required.

Minimum requirements:

- The student has successfully completed the 10th grade
- The high school principal or his/her designee certifies the student has a minimum cumulative “B” average and recommends the student be admitted.
- The student enrolls only in postsecondary courses for which high school prerequisites have been completed.

Required Admission Documentation:

- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Accelerated Recommendation Form signed by the high school principal or designee

*Accelerated high school students are admitted on a “conditional” status. The conditional status remains in effect and an official college transcript cannot be released until Northwest-Shoals Community College receives an official transcript documenting proof of high school graduation. Transcripts released prior to receiving the final high school transcript will be stamped CONDITIONAL CREDIT.

*Accelerated high school students are not eligible for federal financial aid or institutional scholarships.
High School Dual Enrollment Student

This program is available to qualified high school students who have received approval from their high school to receive both college credit and high school credit.

Minimum requirements:
- The student must have at least a “B” average (3.0 on a 4.0 scale) in completed high school courses.
- The student must have written approval of the appropriate principal and counselor
- The student must be in grade 10, 11, or 12.

Required Admission Documentation:
- Northwest-Shoals application for admission
- One primary form of ID (unexpired government-issued photo ID)
- Copy of current high school transcript

Dual Enrollment high school students are admitted on a “conditional” status. The conditional status remains in effect and an official college transcript cannot be released until Northwest-Shoals receives an official transcript documenting proof of high school graduation. Transcripts released prior to receiving the final high school transcript will be stamped CONDITIONAL CREDIT.

Dual Enrollment high school students are not eligible for federal financial aid or institutional scholarships.

Students who are not attending public school, but who are enrolled in a private school or church school who are receiving instruction from a private tutor may also participate in the Dual Enrollment Program. Student eligibility must be certified by the appropriate official at the private school or church school or by the private tutor.

Audit Student

An audit student is an applicant who wishes to enroll for classes only on an audit basis. The applicant must comply with the college admissions requirements by submitting an application for admission, one primary form of identification, an official high school transcript verifying date of graduation or GED certificate, official transcripts from all colleges attended. A student with a baccalaureate degree will need to submit only the transcript from the college awarding the degree. Audit students must abide by class attendance policy and all standard course requirements, excluding the completion of course examinations. The cost of auditing a course is the same as enrolling for credit.

Admission of International Students

Northwest-Shoals Community College must release to SEVIS and DHS officers information concerning the status and periodic reporting of all F1 students. The international student policy may be modified as needed.

In addition to the admission requirements for U.S. citizens, all international students must meet the following admission requirements:

1. All international student applicants, (first-time, transient, or transfer) must submit original copies of their Test of English as a Foreign Language (TOEFL) examination scores showing proficiency in both written and spoken English. A minimum score of 500 on the paper-pencil TOEFL test, 173 computer-based test score, or 61 internet based test score is required for admission. The IELTS of 5.5 is acceptable to fulfill the English requirement. A graduate of an accredited U.S. high school or completion of ENG 101 at an accredited college will be exempt from the TOEFL. The TOEFL score of 500 may be waived for students from the following countries: Australia, Bahamas, Bermuda, Canada (verify from transcript), England, Ireland, Jamaica, New Zealand, Scotland, Antigua and Barbuda, Barbados, Grenada, Belize, Dominica, Malawi, St. Lucia, St. Kitts and Nevis, Nigeria, Tanzania, The Gambia, Tobago and Trinidad and the Virgin Islands. All other waivers must be submitted to the Chancellor for approval with substantial documentation.

2. Official transcripts (high school/college) must be provided in English. Translations must be completed by an organization affiliated with the National Association of Credential Evaluation Services.

3. Any English composition course completed by international transfer applicants must have been completed with a minimum “C” grade at a regionally accredited institution prior to acceptance at the College.

4. All international student applicants must submit proof that they have a source of income sufficient to pay living expenses at the level established by Federal Grant programs. The Admissions/Records Office must be provided with an AFFIDAVIT OF FINANCIAL SUPPORT FOR EDUCATIONAL AND PERSONAL EXPENSES from the person, organization, or institution who is financially responsible for the international student. The minimum amount required must be equal to $20,000.00. The letter must be signed and dated within one year of the time the student plans to enroll. Additionally, international student applicants must sign a waiver of financial responsibility for the College.

5. All international student applicants must purchase ACCIDENT AND HEALTH INSURANCE POLICIES which include repatriation expenses (International Association for Foreign Students Basic and Major Medical Expenses Accidental Death Policy). The student must purchase this insurance through NW-SCC each semester.

6. All international students who have their own transportation must have liability insurance. (This is in compliance with state law.) A copy of the insurance policy and a valid driver’s license must be submitted to the Admissions Office.

7. All international students must provide current documentation of Tuberculosis (TB) screening.

8. International student applicants may need to secure private housing since the College has limited campus housing.

9. International students must take the COMPASS before being admitted to the College. International students MUST then register for the appropriate English and math courses.

10. I-20 forms are issued after 9-10 class days. All required documents must be on file in the Admissions Office at least 30 working days prior to the registration dates for fall and summer semesters. All spring documents must be submitted the last class day in November. No
applications from international students will be accepted later than 30 days prior to the beginning of any semester. Applications received after the deadline will be considered for the subsequent semester.*

11. All international students must report immediately to the International Student Office upon arrival to the College. It is extremely important that a non immigrant maintain their status (F1) while in the United States. F1 status can be properly maintained by registering as a full-time student each semester, maintaining a good GPA, and following the correct transfer policies. Failure to maintain F1 status will result in reinstatement procedures as directed in SEVIS.

*The College reserves the right to limit the number of international students admitted during any academic year.

Admission of Students to Special Programs, Continuing Education, and Community Services Students

Applicants to customized training for business and industry programs, continuing education, community services and courses not creditable toward an associate degree may be admitted, provided they complete the application for admission for special programs and provided they are at least 17 years of age. Admission requirements are established appropriate to the the nature of the particular course. Students may request Special Enrollment status for theses programs. Applicants not meeting the minimum admission requirements may be admitted only to non-credit programs. Additional information may be obtained by contacting the Director of Training for Existing Business and Industry at 256.331.5289.

Admission of Distance Education Students

Students interested in taking distance education courses should follow the regular admissions and financial aid processes. Students may contact these offices by phone, email or in-person for assistance. New or returning students who have never taken a distance education course at the College should complete the distance education orientation, Operation Early Launch, before registering for classes. This orientation gives students valuable information about the learning management system (Moodle), technology requirements, student services, learning resources, and how to be a successful online student. After completing the orientation, students may work with their assigned advisor or CyberAdvisor via the college website, email or phone for assistance with advising or registration. Additional information on technical support, student services, and a variety of other resources for distance education students is available to all current students through a Student Help Site in Moodle.

Students will be provided with a secure login to access Moodle and myNW-SCC. Distance education courses are not self-paced; assignments deadlines are given throughout the semester. Different states offer that the College seek authorization or exemption to offer distance education courses to students in those states. Students residing in states other than Alabama should verify via the College website that the College has authorization to offer courses in their state of residency. Students pursing certification or licensure for a program in a state other than Alabama should also verify the acceptance of course work in their state of residency.

For further information, visit the College website at nwscc.edu or contact the Distance Education Office at 256.331.5395 or cookson@nwscc.edu.

Admission Appeals

The College Admissions Committee verifies the eligibility of students seeking admission or readmission to the College through the appeals process and to Health Related Programs with special admission criteria. Applicants subject to review upon appeal initiated by the student include:

1. Prospective students who are on academic suspension or dismissal from another postsecondary institution;
2. Any prospective student who has been denied admission to the College;
3. Prospective students who have been denied admission to a particular program;
4. Students requesting readmission to the College after being placed on academic suspension from the College;
5. Students who have been suspended from a particular program.

Students or prospective students seeking an appeal must submit their request in writing to the Assistant Dean of Recruitment, Admissions and Financial Aid no later than 3 days prior to the start of the term (see College Catalog or Semester Course Schedules for dates).

A student seeking admission may have his/her case presented before the Committee in absentia or in person. The meeting of the Admissions Committee shall not be considered a due process hearing, but rather a petition for admission/readmission. For further information, please contact the Assistant Dean of Recruitment, Admissions and Financial Aid.

Admission Policies – Non-Degree Seeking Students

Non-degree seeking students must submit the following documents for admission to the College:

• Northwest-Shoals application for admission
• One primary form of ID (unexpired government-issued photo ID)
• Official high school transcript (if attended)
• Official transcript – All other colleges (if attended)

*Students who have achieved a minimum of a Baccalaureate degree are only required to submit a transcript from the granting institution.

Conditional Admission

First-time freshmen, transfer students, and returning (remit) students may be conditionally admitted to Northwest-Shoals Community College for one semester if official high school and/or college transcripts are pending receipt. No student shall be allowed to enroll for a second semester unless all required admission documents have been received by the College prior to the start of the student’s second semester. Likewise, official NW-SCC transcripts will not be released until all required admission documents have been received by the College. It is the student’s responsibility to contact the appropriate high school and/or agencies and to have the official required documents mailed directly to the College.

Students who are conditionally admitted to the College are ineligible to receive federal financial aid benefits.
Expenses and Financial Assistance
# Tuition and Fees

The following information reflects the current tuition and fee schedule approved by the Alabama State Board of Education. Regular courses are defined as day, night, weekend, off-campus, mini-terms, videoconferencing, and web-assisted. Distance Education courses are defined as blended, tele-web, and web. The College reserves the right to change, modify, or alter fees, charges, expenses, and costs of any kind without notice as approved by the State Board of Education.

Tuition and fees above 19 semester hours will be calculated at the current, appropriate rate. The in-state tuition rate shall be extended to students who reside outside of Alabama in a state and county within fifty (50) miles of either campus. See chart on Page 16 and contact the Business Office for details.

**NOTE:** Tuition and fee charges are those in effect for 2015-2016 academic year. They are subject to change, so for current charges, contact the Fiscal Affairs Office at either campus.

### STUDENT INSURANCE FEES (See page 189)

- **Fall Semester**: $7.50
- **Spring Semester**: $7.50
- **Summer Semester**: $5.00

### PARKING DECAL FEE

- **Fall Semester**: $8.00
- **Spring Semester**: $8.00
- **Summer Semester**: $4.00

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### Alabama Residents

- **Credit Hours**
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- **Facility Renewal Fee**
- **Building Fee**
- **Bond Fee**
- **Surety Fee**
- **Total**

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**Distance Education students are required to take at least one proctored exam on campus.** Although we make every effort to accommodate distance education students with low cost or no cost test proctoring services, students who are unable to take exams at either of the NW-SCC campus testing centers will be responsible for any changes incurred at remote test proctor sites and will pay any required fees directly to these sites. Students who anticipate the need for a remote test proctor should contact the NW-SCC Distance Education Office at 256.331.5395 for assistance as soon as possible.
### Non-Residents of Alabama and Foreign Students

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### Terms and Conditions for Assessing Tuition

For purposes of assessing tuition, applicants for admission shall be classified in one of three categories as outlined below:

#### Resident Student

A Resident Student shall be charged the in-state tuition rate established by the State Board of Education.

A Resident Student is an applicant for admission who is a citizen of the United States or a duly registered resident in the State of Alabama for at least 12 months immediately preceding application for admission or whose non-estranged spouse has resided and had habitation, home, and permanent abode in the State of Alabama for at least 12 months immediately preceding application for admission. Consequently, an out-of-state student cannot attain Resident Student status simply by attending school for twelve months in the State of Alabama.

In the case of minor dependents seeking admission, the parent(s) or legal guardian of such minor dependent must have resided in the State of Alabama for at least 12 months immediately preceding application for admission. If the parents are divorced, residence will be determined by the residency of the parent to whom the court has granted custody.

**MINOR:** An individual who because of age, lacks the capacity to contract under Alabama law. Under current law, this means a single individual under 19 years of age and a married individual under 18 years of age, but excludes an individual whose disabilities of non-age have been removed by a court of competent jurisdiction for a reason other than establishing a legal residence in Alabama. If current law changes, this definition shall change accordingly.

**SUPPORTING PERSON:** Either or both parents of the student, if the parents are living together or if the parents are divorced or living separately, then either the parent having legal custody or, if different, the parent providing the greater amount of financial support. If both parents are deceased or if neither has legal custody, supporting person shall mean, in the following order: the legal custodian of the student, the guardian, and the conservator.

In determining Resident Student status for the purpose of charging tuition, the burden of proof lies with the applicant for admission.

A. Students participating in the Southern Regional Electronic Campus (or any successor organization) shall be considered Resident Students for tuition purposes.

B. An individual claiming to be a resident shall certify by a signed statement each of the following:
   1. A specific address or location within the State of Alabama as his or her residence.
   2. An intention to remain at this address indefinitely.
   3. Possession of more substantial connections with the State of Alabama than with any other state.

C. Though certification of an address and an intent to remain in the state indefinitely shall be prerequisites to establishing status as a resident, ultimate determination...
of that status shall be made by the institution by evaluating the presence or absence of connections with the State of Alabama. This evaluation shall include the consideration of all the following connections:

1. Consideration of the location of high school graduation;
2. Payment of Alabama state income tax as a resident;
3. Ownership of a residence or other real property in the state and payment of state ad valorem taxes on the residence or property;
4. Full-time employment in the state;
5. Residence in the state of a spouse, parents, or children;
6. Previous periods of residency in the state continuing for one year or more;
7. Voter registration and voting in the state; more significantly, continuing voter registration in the state that initially occurred at least one year prior to the initial registration of the student in Alabama at a public institution of higher education;
8. Possession of state or local licenses to do business or practice a profession in the state;
9. Ownership of personal property in the state, payment of state taxes on the property, and possession of state license plates;
10. Continuous physical presence in the state for a purpose other than attending school, except for temporary absences for travel, military service, and temporary employment;
11. Membership in religious, professional, business, civic, or social organizations in the state;
12. Maintenance in the state of checking and savings accounts, safe deposit boxes, or investment account;
13. In-state address shown on selective service registration, driver’s license, automobile title registration, hunting and fishing licenses, insurance policies, stock and bond registrations, last will and testament, annuities, or retirement plans.

Students determined to be eligible for resident tuition will maintain that eligibility upon re-enrollment within one full academic year of their most previous enrollment unless there is evidence that the student subsequently has abandoned resident status for example, registering to vote in another state. Students failing to re-enroll within one full academic year must establish eligibility upon re-enrollment.

Non-Resident Student  
(additional persons for resident tuition)

A Non-Resident Student, one who does not meet the standard of having resided in the State of Alabama for at least 12 months immediately preceding application for admission, shall be charged the in-state tuition rate established by the State Board of Education under the following circumstances, provided such student is a citizen of the United States.

The dependent student:

a. whose supporting person is a full-time permanent

<table>
<thead>
<tr>
<th>College</th>
<th>Campus</th>
<th>Adjacent State</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW-SCC</td>
<td>Phil Campbell</td>
<td>Mississippi</td>
<td>Chicksaw Clay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Itawamba Lee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lowndes Monroe</td>
</tr>
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<td></td>
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<td></td>
<td>Pontotoc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tishomingo</td>
</tr>
<tr>
<td>NW-SCC</td>
<td>Shoals</td>
<td>Tennessee</td>
<td>Lawrence</td>
</tr>
<tr>
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<td></td>
<td>Wayne</td>
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<tr>
<td>NW-SCC</td>
<td>Shoals</td>
<td>Mississippi</td>
<td>Alcorn Itawamba</td>
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<td>Prentiss Tishomingo</td>
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<tr>
<td>NW-SCC</td>
<td>Shoals</td>
<td>Tennessee</td>
<td>Hardin Giles</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Lawrence McNairy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wayne</td>
</tr>
</tbody>
</table>

Out-of-State Student

Any applicant for admission who does not fall into one of the categories noted above shall be charged a minimum tuition of two times the resident tuition rate charged by that institution.

Students initially classified as ineligible for resident tuition will remain that classification for tuition purposes until they provide documentation that they have qualified for resident tuition.

Senior Discount

Tuition for credit classes is free to persons 60 years or older. All other fees are calculated at the normal rate. A 10% discount can be applied to non-credit continuing education classes. Admission requirements are the same for all students, and all classes are available for audit if students have met course prerequisites listed in the course description.

Refunds to Students

Northwest-Shoals Community College strives to improve the service provided to our students and prospective students. The U.S. Department of Education recognizes the need for improving disbursement methods and made changes to its policy; 34 CFR 668.164, allowing institutions to require banking information from all students. The information will be solely used for refund disbursement and will remain completely confidential as required by FERPA. All refunds from Northwest-Shoals are electronic.

Refund Policy

Refund for Complete Withdrawal

A student who withdraws or is withdrawn from ALL classes before the first day of class will be refunded the total tuition and other institutional charges.

A student who withdraws or is withdrawn COMPLETELY on or after the first day of class but prior to the end of the third week of class will be refunded according to the official withdrawal date as follows:
<table>
<thead>
<tr>
<th>Percent of tuition refunded</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal during first week</td>
<td>75% of net tuition</td>
</tr>
<tr>
<td>Withdrawal during second week</td>
<td>50% of net tuition</td>
</tr>
<tr>
<td>Withdrawal during third week</td>
<td>25% of net tuition</td>
</tr>
<tr>
<td>Withdrawal after end of third week</td>
<td>No refund</td>
</tr>
</tbody>
</table>

Withdrawal periods for refunds during mini-terms may be prorated.

**Administrative Fee**

An administrative fee not to exceed 5 percent of tuition and other institutional charges or $100, whichever is smaller, shall be assessed for each withdrawal within the period beginning the first day of class and ending at the end of the third week of class.

**Refund for Partial Withdrawal**

Students who do not COMPLETELY withdraw from the College but drop a class during the regular drop/add period will be refunded the difference in tuition paid and the tuition rate applicable to the reduced number of hours, including fees appropriate to the classes dropped. **There is no refund due to a student who PARTIALLY withdraws after the official drop/add period.**

**Refund for Alabama National Guard and Reservist Called to Active Duty**

Students who are active members of the Alabama National Guard or reservists who are active duty military and are called to active duty in the time of national crisis shall receive a full tuition refund at the time of withdrawal, if such students are unable to complete the term due to active duty orders or assignment to another location.

**Federal Title IV Student Aid Refund Policy (Pell Grants, Student Loans, SEOG)**

The College complies with federal regulations relative to refund of tuition and other institutional charges.

Under, Return of Title IV Funds, the law requires that, when a student withdraws during a payment period or period of enrollment, the amount of SFA program assistance earned up to that point is determined by a specific formula. The withdrawal date is the date the student submits a completed withdrawal form to the Admissions Office and Cashier. In those cases when a student unofficially withdraws (stops attendance without completing withdrawal process) or there is no recorded last date of attendance, the withdrawal date is the mid-point (50%) of the term. If the student received (or the College received on the student’s behalf) less assistance than the amount earned, the student will be able to receive those additional funds. If the student receives more assistance than earned, the excess funds must be returned.

The amount of assistance that a student has earned is determined on a pro-rata basis. That is, if a student completed 30 percent (30%) of the payment period or period of enrollment, he or she earns 30 percent (30%) of the assistance the student was originally scheduled to receive. Once the student completes more than 60 percent (60%) of the payment period or period of enrollment, he or she earns all of the assistance. **The 60% date will be published in each semester schedule.**

If a student receives excess funds that must be returned, the school must return a portion of the excess equal to the lesser of:

- the institutional charges multiplied by the unearned percentage of the funds, or
- the entire amount of the excess funds

Students will be required to repay the college any funds the institution had to pay the USDE as a result of their withdrawal. Any loan funds that the student must return, the student (or the student’s parent for a PLUS Loan) must repay in accordance with the terms of the promissory note. That is, the student makes scheduled payments to the holder of the loan over a period of time.

Students who have completely withdrawn and are required to return funds under the federal regulations will be required to return only 50 percent (50%) of the Pell Grant assistance of their designated amount to repay (full amount on student loans). The College may require that its designated amount also be repaid by the student. It is the student’s responsibility to make arrangements with the College or the Department of Education to return overpaid funds.

Students who do not meet the policy guidelines and have charged registrations to financial aid will be notified that they must pay the cashier in order to maintain their class schedule. Should the student fail to pay for those classes, the college will administratively withdraw the student for that semester.

**Books and Supplies (see College Bookstore page 190)**

Note: A sample of how the tuition refunds are calculated can be obtained by contacting the Business Office at the College.

**Guidelines and Definitions for Refunds**

**I. Official Withdrawal**

In the case of an official withdrawal, the student’s withdrawal date is either the date the student notifies the College of his or her intent to withdraw or the date of withdrawal specified by the student, whichever is later.

**II. Unofficial Withdrawal**

In the case of an unofficial withdrawal, the withdrawal date is the last recorded date of class attendance (as documented by the College). Further, the College is required to determine the withdrawal date for an unofficial withdrawal within 30 days of the end of the period of enrollment, the academic year, or the program, whichever is earliest.

**III. First Day of Class - Definition**

The first day of class is the official instructional day of class as stated in the College calendar. There is only one first day for all classes in any term.

**IV. Other Institutional Charges**

Other institutional charges during the first, second, or third week of class include room, board, and fees as defined in the State Board Policy Manual 804.01.

**V. Week - Definition**

First day of class (See III) running seven calendar days (inclusive of Saturday and Sunday).

**VI. Non-Returnable Items**

Non-returnable items may vary by the College. The College has the obligation to notify students in advance of all non-returnable items, i.e. medical and health supplies or equipment, uniforms, tools, and supplies.

**VII. Net Tuition**

Net tuition charges are the sum of tuition and all other
institutional charges less the Refund Administrative Fee.

**Student Financial Aid**

**Financial Assistance**

Because increased costs have affected every aspect of the educational process, colleges and universities have been called on to assist the growing number of students and parents who cannot afford to carry the financial burden of the education required for professional training.

The Financial Aid Office at the College is intended to assist deserving and needy students and give them the opportunity to achieve a better education. All financial aid is coordinated through the Financial Aid Office.

To obtain financial help for expenses at the College, students may apply on-line at [www.fafsa.gov](http://www.fafsa.gov). Offices are located in the Student Services Building on the Shoals Campus and the Administration Building on the Phil Campbell Campus.

Additional information on the Financial Aid Program may be obtained by calling the Office of Student Financial Services at 256.331.5364, Shoals Campus, or 256.331.6232, Phil Campbell Campus.

**Student Rights and Responsibilities**

Students have the responsibility of knowing the following:

1. Requirements for applying for financial aid;
2. College refund and repayment policies;
3. Guidelines affecting a financial aid award;

Students have the right to discuss and to appeal financial aid decisions in writing with personnel in the Office of Student Financial Services.

**Eligibility**

To receive Title IV student financial assistance, a student must meet the following requirements:

1. Be unconditionally admitted to the College;
2. Be a high school graduate or have a GED;
3. Be a United States citizen or an eligible noncitizen;
4. Be registered with Selective Service, if required;
5. Be in need financially;
6. Be enrolled at the College as a regular student in an eligible degree or certificate program. Effective July 1, 2011 certificate programs except Cosmetology are subject to the clock to credit hour conversion. Cosmetology related programs are subject to clock hours;
7. Be making satisfactory academic progress;
8. Be in nondefault on a federal student loan and not owe a refund on a federal grant. See page 19 on Federal Aid Refund Policy.

**Federal Student Aid**

**Basis of Awards**

The Student Financial Aid Program at the College is administered in accordance with policies and guidelines that are typical of most colleges and universities in the United States. The College bases its awards on demonstrated financial need which is defined as the difference between a family’s expected contribution and the student’s yearly educational expenses (cost of attendance). The student, his/her family, and his/her spouse are expected to make a maximum effort to assist with educational expenses. The basis on which need-based programs are built is that the family is primarily responsible to the extent they are able for financing the student’s education.

The amount of family contribution is determined by a careful analysis of financial information submitted on the Free Application for Federal Student Aid (FAFSA).

**Federal Financial Aid Programs**

**IMPORTANT NOTICE**

Any information concerning the Title IV Federal Financial Aid programs presented herein is subject to all regulations published by the U.S. Department of Education and other Federal regulatory agencies. Since this information is subject to change, any information presented which is in conflict with existing regulations or is superseded by such changes in the regulations will be considered null and void.

The four Federal Student Financial Aid Programs are (a) Federal Pell Grants, (b) Federal Supplemental Educational Opportunity Grants (SEOG), (c) Federal Work-Study (FWS), and (d) Federal Direct Student Loans. Students should apply for Federal Student Aid online at [www.fafsa.gov](http://www.fafsa.gov).

**Federal Pell Grant**

Pell Grants are awards to help undergraduates pay for their postsecondary education. The Pell Grant Program is the largest federal student aid program and does not have to be repaid. For many students, these grants provide a foundation of financial aid. Students may also receive aid from other federal and non-federal sources. Recipients may charge their tuition, fees and books to the Pell Grant. The College disburses all remaining balances. The Business Office disburses all NWSCC funds. The College voids all scheduled disbursements not claimed fifteen days after the term ends.

**Federal Supplemental Education Opportunity Grant (FSEOG)**

FSEOG is for undergraduates with exceptional financial need (with priority given to Pell Grant recipients), and the grant does not have to be paid back. The College will distribute FSEOG money to students based on need and available funds.

**Federal Work-Study**

Students demonstrating a need may be eligible to work part-time. To determine a student’s need, the student must apply through FAFSA need analysis. The student’s need determines the number of hours worked each week. Students receive payment monthly at the current minimum wage rate. Applications are available in the Financial Aid Office.

**Federal Direct Student Loan Program**

The Federal Direct Student Loan Program makes low interest loans available to students through the Federal Government to help students pay for education after high school. Several
income sources are used to determine eligibility including the family financial resources and other financial assistance the student may be receiving. A student who qualifies may borrow up to $3,500 the first year and $4,500 the second year of subsidized loans from the Federal Government during the first two years of college.

Student Loans for one (1) semester will be disbursed in two payments. The second disbursement will be made at the 50% point of the semester.

Disbursement of loan funds is as follows: the Federal Government electronically transfers loan funds to the Business Office; the funds are recorded and eligibility is checked by the Financial Aid Office before funds are available for disbursement approximately 14 days after classes begin (or 3 days thereafter). Funds that are not disbursed are returned to the Federal Government.

Unsubsidized Direct Loans
Students not qualifying for full or partial Subsidized Direct Loans may qualify for Unsubsidized Direct Loans.

Parent Loans for Students
Parent Loans for Undergraduate Students (PLUS) are for dependent students. Parents who are eligible may borrow up to the cost of attendance minus any financial aid. The repayment period will begin within 60 days of full receipt of the loan. A student must apply for Federal Student Aid before the parent can apply for a PLUS Loan.

College Loan Policy
Federal policy does not permit new first-time freshmen to receive a federal student loan until after 30 days of enrollment. Transfer students are not considered new and must have all transcripts on file and must not be on Academic Probation to receive a loan. Students may contact the Financial Aid Office for additional information. Students must maintain at least 6 hours of enrollment.

Federal Financial Aid Application Procedures
The student’s and/or parents’ previous year’s income and any assets determine the applicant’s financial aid need. Therefore, those who qualify must apply for financial aid each year. Students may apply online at www.fafsa.gov. Students who qualify may apply for financial aid at any time. However, processing time can be from three to four weeks; therefore, the application process should begin as early as possible. Please apply for aid and follow up with the Financial Aid Office well before the semester begins.

Priority dates for the 2015-2016 academic year:
Fall 2015......................................................... June 1st
Spring 2016 .................................................. November 1st
Summer 2016..................................................April 1st

All financial aid application forms and instructions are available in the Financial Aid Office and online at www.nwssc.edu.

To apply for financial aid through Pell Grants, College Work-Study, Direct or Plus Loans, or Supplemental Education Opportunity Grants, applicants must complete the Free Application-For-Federal-Student-Aid.

Verification of Financial Aid Eligibility
The Federal Student Aid Program determines the initial eligibility for the student. The Financial Aid Office determines whether an eligible student (based on need) is also eligible to receive payment. Federal regulations require verification of adjusted gross income, tax paid, household size, untaxed income, and other items. If a student’s application is selected for verification:

1. He/she could be required to submit a copy of a tax return transcript for the student, his/her parents (if he/she applies as a dependent student) and his/her spouse’s transcript (if he/she is married and his/her spouse filed a separate return). Call 1.800.908.9946 or go to the IRS website at www.irs.gov to obtain tax return transcripts.

2. Student must provide records of benefits received from the Social Security Administration, Veterans’ Administration, and other agencies that might pay non-taxable benefits upon request.

3. Student must check with the Financial Aid Office to inquire about any other additional requirements.

This documentation must be received before the financial aid staff can complete processing of the application. For this reason, all students are urged to retain copies of these records.

Satisfactory Academic Progress Requirements for Financial Aid

1. Federal Title IV Student Financial Aid Regulations require that all students who receive financial assistance maintain minimum standards of satisfactory academic progress. Satisfactory academic progress will be checked when financial aid is awarded and when financial aid awards are revised.

Minimum Standards of Satisfactory Academic Progress:

Time Frame: Each student receiving financial assistance will be expected to complete his/her course of study within a period not to exceed 1.5 times the length of his/her program of study; e.g. a two-year program of study (4 semesters, 64 hours) must be completed within 3 years (6 semesters, 96 hours) of attendance. Effective July 1, 2012, the maximum number of semesters that a student may receive Pell Grants is twelve (12) full time semesters.

Qualitative Measures: Each student will be expected to meet or to exceed the following GPA value when satisfactory academic progress is checked:

<table>
<thead>
<tr>
<th>Hours Attempted</th>
<th>GPA</th>
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</thead>
<tbody>
<tr>
<td>12-21</td>
<td>1.50</td>
</tr>
<tr>
<td>22-32</td>
<td>1.75</td>
</tr>
<tr>
<td>33 and above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Each student must have attained a 2.0 cumulative GPA (C average) by the end of his/her second academic year of study regardless of enrollment status during the two-year period. Transfer students on probation are generally not eligible to receive Federal Student Aid. Contact the Financial Aid office for additional information.
Quantitative Measure: Each student must pass at least two thirds (67%) of the hours attempted.

2. When a student is suspended, whether the student serves the suspension or is readmitted upon appeal, the student is not eligible to receive financial aid for the duration of the suspension. The student will not be eligible again to receive financial aid until he/she makes the cumulative GPA required for the number of credit hours attempted at the College or the semester GPA is 2.0 or above (based on at least 12 credit hours or above attempted at the College during that semester).

3. Students who do not meet these standards will not be eligible for Title IV Federal financial aid.

4. The College will provide students with an appeal process in accordance with Federal Regulations. Students must appeal in writing to the Financial Aid Office.

Review Process
Each student’s academic progress will be evaluated at the end of each semester. A student whose progress has been determined to be unsatisfactory and who elects to re-enroll at his or her own expense will have his/her progress re-evaluated at the end of each semester to see if he/she has regained satisfactory academic progress by achieving the required GPA (2.0 with 12 hours) and/or the required semester GPA and by passing the required minimum number of hours.

Appeal Process on Unsatisfactory Academic Progress
Upon written appeal by the student, failure to meet one or more of the satisfactory academic progress requirements will be evaluated by the Financial Aid Committee to determine if there are mitigating circumstances.

Scholarship Programs
The Scholarship Committee is responsible for administering all scholarships. The following is a listing of the student scholarships available at the College:

High School Academic
ACT Academic - minimum ACT score of 25
Academic/Technical - Career Programs
Opportunity Scholarships - Need based scholarships (FAFSA application required).
Performing Arts - vocal and instrumental
Student Leadership - SGA officers, Ambassadors, Clubs and Organizations
Shoals Scholar Dollars - Lauderdale and Colbert counties recent high school graduates who meet criteria. Students must have a solid C high school average, 95% high school attendance, and no major disciplinary actions.
GED - Presented to one participant in the Adult Education Program on each campus based on test results in the last 12 months and recommended by the Adult Basic Education Department for up to two years of eligibility (2.0 minimum GPA and 12 hours minimum per semester required). Summer semester granted only by special approval.

GED free class - Based on authorization from the Alabama Department of Postsecondary Education, all Alabama students receiving their GED are allowed up to 3 credit hours of instruction.

Ready to Work Program - These scholarships are based on recommendations from the Director of the Ready to Work Program. Recipients receive up to 3 credit hours of instruction on this scholarship which is also authorized by the Alabama Department of Postsecondary Education.

College Bowl Team
College Foundation
Students interested in scholarships should contact the Foundation Office. The annual deadline is generally around March 19.

Scholarship Policies and Procedures
Students on institutional scholarships must have an enrollment status of at least 12 credit hours and maintain the appropriate semester GPA as outlined below:

<table>
<thead>
<tr>
<th>Program</th>
<th>Minimum GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Academic</td>
<td>3.0</td>
</tr>
<tr>
<td>Academic/Technical</td>
<td>3.0</td>
</tr>
<tr>
<td>Leadership</td>
<td>2.5</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>2.0</td>
</tr>
<tr>
<td>Shoals Scholar Dollars</td>
<td>2.5</td>
</tr>
<tr>
<td>All others</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Students will be monitored on a semester by semester basis for credit hours and GPA. Should the student fail to meet the minimum qualifications, he/she will be sent a letter from the College informing him/her that he/she has one semester to meet the minimum standards or the scholarship is cancelled. Students wishing to appeal a suspended scholarship may submit a letter to the Director of Financial Aid for the Scholarship Committee to consider an appeal for reinstatement.

Admission to the Senior Adult Scholarship Program
Students who meet College admission requirements and who are 60 years of age or older are eligible for the Senior Adult Scholarship program. The scholarship covers tuition only in college-credit courses (defined as courses measured in both credit hours and scheduled weekly contact hours that are part of an organized and specified program leading to a formal award-associate degree or certificate).

Scholarships are limited to students on a space available basis in courses taught on campus or in an approved off-campus site.

Northwest-Shoals Community College Foundation, Inc.

Northwest-Shoals Community College Foundation, Inc. exists for the sole purpose of providing support for programs and activities which enhance the quality of education and expand the educational opportunities for students enrolled at Northwest-Shoals Community College.

To achieve this purpose, the Foundation seeks to heighten community awareness of the mission and accomplishments of the College and to secure contributions and bequests which will be used to support academic and technical programs as well as scholarships.

The Board of Directors of Northwest-Shoals Community
College Foundation is composed of business and community leaders who are residents of the College service area which includes the following counties: Lauderdale, Lawrence, Colbert, Franklin, and Winston. These individuals have a strong interest in the College and are committed to using their talents, energy, and influence to generate community support for the College and Foundation.

The Foundation offers a variety of scholarships for students in the College’s service area. Online applications are available at the College’s website: nwssc.edu beginning January of each year. The deadline for application submissions is around the second week of March of each year. For more information on these scholarships, please contact the Foundation Office by e-mail teresah@nwssc.edu.

Endowed Scholarships:
Aaron B. Singleton Memorial Scholarship
Bill Lucas Memorial Scholarship
Billy Bowling Memorial Scholarship
Bobby Michael Denton Memorial Scholarship
Broughton Isom Memorial Scholarship
Cecil Earl Clapp, Sr. Memorial Scholarship Cliff and Mabel Brown Memorial Scholarship
Mitchell Self Memorial Scholarship
Esther McAfee Flippo Hunt Memorial Scholarship
Franklin A. Lenfestey Memorial Scholarship
Homajean Grisham Memorial Scholarship
Joseph W. Wade Memorial Scholarship
Joshua “Josh” Green Memorial Scholarship
Martha Isbell Memorial Scholarship
Marvin E. Daly Memorial Scholarship
Muscle Shoals Kiwanis/Walmart Scholarship
M.S. Safety & Health Association Scholarship
Mattie Lou Gist Memorial Scholarship
Orben F. Gist Memorial Scholarship
Percy Sledge Memorial Scholarship
Shoals Home Builders Association Scholarship
Walston and Jester Hester Memorial Scholarship
William F. “Bill” Gardner Memorial Scholarship
William M. “Bill” Gough, III Memorial Scholarship

Memorial and Developing Scholarships:
Alan Bragwell Memorial Scholarship
April Alls Beck Memorial Scholarship
Ashley Darby Memorial Scholarship
Bruce Crowe Memorial Scholarship
Diana Ashe-Clayton Memorial Scholarship
Dorothy England Outdoor Leadership Scholarship
June Hester memorial scholarship
Shelby Grissom Memorial Scholarship

Other Scholarships:
Dual Enrollment / Dual Credit Scholarship
Grainger Foundation Scholarship
NW-SCC Faculty and Staff Scholarship
Terry Award Book Scholarship
American Legion Florence/ Lauderdale Post 11 Scholarship
Austin Blake Miller Memorial Scholarship
Barry “Tyler” Rhea Memorial Scholarship
Cody Fisher Memorial Scholarship
Howel Heflin Memorial Scholarship
Hunter “d’AmAn” Moore Memorial Scholarship
Integrated Corporate Solutions Scholarship
Tuscumbia Kiwanis Club Scholarship
VFW Post 5140/Paul W. Shockley Sr. Memorial Scholarship
Wayne County Bank Scholarship

Note: Scholarships are awarded yearly based on available funds.

Other Financial Aid Programs
Vocational Rehabilitation Program
Under this program, disabled persons or persons with vocational limitations may qualify for financial assistance. For information, contact the Muscle Shoals Rehabilitation Agency at 256.381.1110 or the Jasper Rehab at 1.800.671.6841.

Veterans Programs
The Veterans Affairs Office is the certifying authority for veterans, service members, and their dependents. It serves as the link between the Regional Veterans Affairs Office and the VA benefit recipient. For further information, contact the campus VA representative in the Financial Aid Office.

The following individuals shall be charged the in-state/in-district rate, or otherwise considered a resident, for tuition purposes:
• A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill – Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in the State of Alabama while attending a school located in the State of Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge from a period of active duty service of 90 days or more.

• Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the State of Alabama while attending a school located in the State of Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor’s discharge from a period of active duty service of 90 days or more.

• A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b) (9)) who lives in the State of Alabama while attending a school located in the State of Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the Service member’s death in the line of duty following a period of active duty service of 90 days or more.

• Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or death described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.

Alabama G.I.
Reservists and National Guardsmen may be eligible for educational benefits. For more information, see your unit educational official.

Workforce Investment Act (WIA)
The Workforce Investment Act assists with training or
retraining of citizens who qualify as being either economically disadvantaged or as a dislocated worker. For further information, contact the Sheffield CareerLink at 256.381.0611 or the Hamilton CareerLink at 205.921.5672.

TRA (Trade Re-adjustment Act)
This program is designed to retrain persons who have lost their jobs because of certain trade agreements. For further information, contact the Shoals Career Center at 256.383.5610.

Cooperative Education
Cooperative Education (Co-op) is an educational process in which students are employed for specific periods of work as an integral part of their chosen field of study. This employment is related to the student’s course of study and individual interest. Applications may be completed at the Cooperative Education Office (Vice President).

Franklin County Scholarship
Requirements:
1. Franklin County, Alabama resident for the past two consecutive years.
2. Submit applications each year by June 30 to Franklin County Commission Office, P.O. Box 1028, Russellville, Alabama 35653.
3. Applicant must have been enrolled as an undergraduate student at a college within the state of Alabama.
4. Complete twelve (12) credit hours per semester and maintain a 2.0 GPA.
5. Provide proof of attendance and coursework including GPA for each term as soon as possible after the Spring Semester ends but no later than June 30 to the Franklin County Commission Office.

Scholarship funds are paid on an annual basis by August 1. The amount is determined annually by the Franklin County Scholarship Board - based on funds available and the number of applications received.

State Student Incentive Grant
The Federal Government, through a matching grant program with the State of Alabama, provides grants to students who demonstrate substantial financial need and who meet residency requirements for Alabama. The minimum award per year is $300 for qualified students. The Financial Aid Office will award the Alabama Grant based on available funds.

Veteran Educational Benefits
Certification:
1. Certification will be granted for only those courses which are applicable to the declared program of study (major). Any deviation must be approved in writing by the Assistant Dean.
2. Certification for more than the required number of hours will be granted only upon written approval from the Veterans Administration.
3. Certification may be granted for basic institutional credit courses and developmental courses if such courses are necessary for the student to reach his/her objective.
4. Certification will not be granted for audit courses, continuing education courses, or television courses.
5. The veteran must be recertified for educational benefits when he/she reenrolls college after an interruption of his/her educational program.
6. The veteran who has received college credit at other institutions will be certified for only those courses necessary to complete the declared program of study at Northwest-Shoals Community College.
7. Should a veteran register for a course not in his/her program of study and not approved by the Vice President of Instruction, his/her benefits may be reduced at any time during the semester. This action may occur without notification to the student.

Class Attendance of Veterans
All students enrolled in College are strongly encouraged to attend classes. For the veteran, failure to attend class and to complete assignments may result in a reduction or elimination of benefits. Any irregularity in class attendance must be approved by the instructor and Vice President of Instruction as to whether absences are excused or unexcused. Should the veteran accumulate excessive unexcused absences, the reduction of benefits to the veteran will be made effective the last date of attendance in class.

Withdrawal from Class or Classes by Veterans
Veterans may adjust their schedule without penalty only during the late registration period. A veteran who withdraws after this period without demonstrating extenuating circumstances will suffer loss of payments under VA educational assistance.

New Students:
A. Fill out an Application for Education Benefits with the Veteran Affairs Office or at the College.
B. Submit appropriate documentation determined by the education benefits applied for.
C. Complete Admission Requirements. Transfer students who have previously received VA education benefits must:
   1. Complete VA Form 22-1995, Request for Change of Program or Place of Training;
   2. Complete Admissions Requirements. Transcripts from other colleges and universities attende must be evaluated for prior credit.

NOTE: All students seeking certification for education benefits to the Veterans Administration should notify the Financial Aid Office of:
A. Program of study
B. Schedule of approved classes each semester-approved by advisor
C. Change of program
D. Change of address
E. Change in degree plan
F. Semester of graduation or transfer
G. Any academic problems student experiences
H. Any courses from which student plans to withdraw

To be eligible for Veterans Administration benefits, students who are veterans must meet the standard of progress requirements applicable to all students.

Veterans Programs

The Veterans Affairs Office, located in the Financial Aid Office, is the certifying authority for veterans, service members, and their dependents. It serves as the link between the Regional Veterans Affairs Office and the VA benefit recipient. For further information, affected members should contact the campus VA representative or the county VA officer.

Alabama G.I. Dependents’ Scholarship Program

Alabama Department of Veterans Affairs offers financial assistance to eligible dependents (child, stepchild, spouse, or unmarried widow(er) of disabled veterans (living or deceased) who have been permanent civilian residents of Alabama prior to entry into military service. Special consideration is given to dependents of permanently and totally disabled veterans who are residents or were residents prior to their death. Other qualifying veterans’ categories for dependents are former prisoners of war (POW), declared missing in action (MIA) and those who died in service.

Maximum educational benefits include free tuition; required textbooks and laboratory fees for four standard academic years; or a prescribed technical course at any state-supported junior or community college, university, or technical school. This program does not pay for remedial classes.

Dependent children must file an application prior to age 26 (may be extended to age 30 in certain cases). A spouse or widow(er) does not have a filing deadline or age limitation.

For more information and application procedures, members should contact their nearest Veterans Affairs Office located in each county courthouse or write to the Alabama G.I. Dependent Scholarship Program, P.O. Box 1509, Montgomery, AL 36102-1509.

Chapter 35 - Survivors and Dependents’ Educational Assistance

VA benefits are available for spouses or surviving spouses and for the children of a veteran who has died as a result of a service incurred disability or who has been declared 100 percent (100%) service connected disabled.

Provide the Veterans’ Administration Regional Office additional information. Applicants should include the veteran’s claim number (File number identification) or Social Security number. Persons eligible for Chapter 35 benefits may also be eligible for REPS or Quayle benefits.

Chapter 35 does not pay for remedial classes.

Montgomery G.I. Bill, Active Duty (Chapter 30)

The Montgomery G.I. Bill establishes a program of education benefits for essentially three groups or categories of individuals based on their active duty service. The benefits available to each may vary depending on his/her particular situation and length of active duty service.

Eligibility Requirements. Individuals entering military service on or after July 1, 1985, have their basic military pay reduced by $100 a month for the first 12 months of their service, in order to be eligible for this educational assistance program. Individuals eligible for the Old G.I. Bill (Chapter 34) as of December 31, 1989, who meet certain eligibility criteria may also be eligible but do not have their basic pay reduced. Persons who, after December 31, 1976, received commissions as officers from service academies (e.g., West Point, the Naval Academy, etc.) or ROTC scholarship programs are not eligible for this program.

Persons separated from active duty because of a service-connected disability or hardship discharge may be eligible for Chapter 30 benefits without meeting the length of service requirements. A Chapter 30 participant separated from active duty due to a physical or mental condition not characterized as a disability may be eligible for Chapter 30 benefits. The condition must not have resulted from the individual’s willful misconduct and must have interfered with the individual’s performance of duty. In these cases, eligible persons would be entitled to one month of education benefits for each month of military service.

In order to be eligible for Chapter 30, the veteran must have been released from active duty with the character of discharge specifically listed as “Honorable.” Persons who complete six months or less of active military service may be issued “uncharacterized” discharges. Those “uncharacterized” discharges issued for reasons of service-connected disability or hardship are considered to be “Honorable” for Chapter 30 purposes.

The Post-9/11 GI Bill (Chapter 33, of Title 38 U.S.C.)

Post 9/11 GI Bill (Chapter 33) educational benefits can be used for training pursued at the institution effective August 1, 2009. Eligible students should go online at www.gibill.va.gov.

Public Law 101-510 - Chapter 30

Effective February 3, 1991, a new category of individuals became eligible for Chapter 30. An individual who originally declined to participate or who was not eligible to participate may elect Chapter 30 before separation if that person is to be involuntarily separated from service. The Department of Defense (DOD) is responsible for obtaining this election before separation.

1. The individual must have been on active duty on Sept. 30, 1990.
2. The individual must have received an honorable discharge due to involuntary separation after February 3, 1991.
3. Before applying for benefits, the individual must have completed the requirements for the secondary school diploma, its equivalency, or 12 credit hours leading to a standard college degree.
4. If the individual originally elected to not participate in Chapter 30, he or she must withdraw the earlier election.
5. If eligible for Chapter 32, the individual must elect to receive benefits under Chapter 30 rather than Chapter
32. An individual who contributed to Chapter 32 is eligible for a refund of unused contributions. The law provides for adding unused Chapter 32 kickers to the Chapter 30 basic rate.

6. The law requires DOD to reduce the pay of an individual electing to participate in Chapter 30 by $1,200. A veteran earns one (1) month of entitlement for each month of active duty service, not to exceed 36 months and has ten (10) years from the date of last discharge or release from active duty to use his or her education benefits.

Montgomery G.I. Bill—Selected Reserve
(Chapter 1606/1607, Title 10, U.S. Code)
Chapter 1606 of Title 10, U.S.C., Educational Assistance for Members of the Selected Reserve, is also referred to as the Montgomery G.I. Bill-Selected Reserve. Since July 1, 1985, VA has held benefit payment responsibility, although the funding of educational assistance payments under this program is provided by DOD.

Eligibility Requirements:
Basic eligibility extends to a person who:

1. On or after July 1, 1985, (a) enlists, or extends an enlistment in the Selected Reserve so that the reservist has an obligation to serve for a period of not less than six (6) years following the date of such action; or (b) is appointed as or is serving as a reserve officer and agrees to serve in the Selected Reserve for a period of not less than six (6) years in addition to any other period of obligated Selected Reserve service; and

2. has completed the requirements of a secondary school diploma (or equivalency certificate) before completing the initial active duty for training (IADT) or before completing a reenlistment or extending an enlistment in order to establish eligibility for Chapter 106 benefits;

3. has completed IADT (Initial Active Duty Training) and

4. is satisfactorily participating in required training in the Selected Reserve.

Eligibility is precluded, if the person:

1. is receiving financial assistance under section 2107 of Title 10, U.S.C., as a member of the Senior Reserve Officers’ Training Corps scholarship program; or

2. has completed a program of education required for a bachelor’s degree or the equivalent.

Entitlement: An eligible reservist is entitled to a maximum of 36 months of educational assistance based on full-time training (or the equivalent in part-time training).

Time Limit: The last day of an eligible reservist’s entitlement period under Chapter 106 is the earlier of either (a) 10 years from the date eligibility began or (b) the date of separation from the Selected Reserve.

Training and Rehabilitation for Veterans with Service-Connected Disabilities (Vocational Rehabilitation)
(Chapter 31, Title 38, U.S.C.)
A veteran may be eligible for Chapter 31 benefits if he or she incurred or aggravated a service-connected disability of 20% or more on or after September 16, 1940, which entitles him or her to DVA disability compensation and who is in need of vocational rehabilitation because his or her disability creates an employment handicap.

Vocational rehabilitation may be provided for up to 48 months. An eligible veteran now generally has twelve (12) years from the date he or she is notified of entitlement to DVA compensation in which to use these benefits. DVA may approve an extension of time and/or length of training in certain cases. Disabled veterans are encouraged to contact the DVA office nearest them to obtain detailed information and to request Form 28-1900, Disabled Veterans’ Application for Vocational Rehabilitation.

Note: Various Veterans organizations such as American Legion, DAV and VFW have scholarship programs available to veterans and their dependents. For information on these scholarships, veterans should contact the sponsoring agency or the local Veterans Affairs Office.
Academic Procedures and Requirements
Placement Testing
All new enrollees who have not successfully completed college-level English and mathematics courses “nor scored 20 or above on the math and English portions of the ACT exams” must take the COMPASS placement test before registering for classes. This test indicates the beginning levels of math, English, and reading courses.

This test allows calculator usage on the algebra portions. The following types of calculators are not permitted: pocket organizers, handheld or laptop computers, electronic writing pads or pen-input devices, models with a QWERTY (typewriter) keypad, and models with built-in capability to simplify algebraic expressions, multiply polynomials, or factor polynomials. Specifically prohibited models: CFX-9970G, Casio Algebra fx 2.0, TI-89, and TI-92. Any four function, scientific, or graphing calculator, except as specified, may be used. There is a $8.00 retesting fee.

College Preparatory Placement
Students who score below the standard placement score established by the College will be required to enroll in related preparatory courses. College preparatory instruction is designed to remediate prior deficiencies in knowledge and skills judged necessary for a student to progress satisfactorily through a college level program or course of instruction. Credit earned for college preparatory courses shall not satisfy requirements for graduation in degree, certificate or diploma programs. A student may enroll in college level courses while enrolled in college preparatory courses as long as the discipline is different than the discipline in which the student scores below the standard placement score. Any student enrolled in two or more college preparatory courses shall not enroll in more than a total of 12 credit hours that semester. Any student who scores below the standard placement score and is placed into college preparatory course instruction in a given discipline must remain in such instruction in that discipline until academic deficiencies are remediated. The College shall maintain data files on each student enrolled in college preparatory courses.

Academic Advisement
Academic advising is an extension of the educational process and is considered an essential part of the student’s educational experience. Its primary purpose is to assist students in the development of meaningful educational plans which are compatible with their life goals. While the academic advisor assists the student by helping identify and assess alternatives and consequences of decisions, the student has the ultimate responsibility for making these decisions.

The College maintains an advising process for the benefit of students. Every student enrolled will be assigned a faculty advisor. Each student is encouraged to discuss plans, problems, and needs with the faculty advisor. If students do not know who their advisor is, they should call Admissions at the Shoals Campus 256.331.5425 or the Phil Campbell Campus at 256.331.6227.

Advisors aid students in verifying that all educational requirements of both the College and their specific programs are met. Advisors are available during advising days and regular office hours throughout the semester. Students are encouraged to make an appointment with their advisor prior to registering for classes each term.

Students experiencing academic difficulty or considering withdrawal from the College for any reason are encouraged to contact their advisor, counselor, advising coordinator, or the assistant dean.

Registration
Registration dates are listed on the College Academic Calendar as well as in each semester’s class schedule. Currently enrolled students may register through the myNWSCC portal. The student is responsible for completing the registration process correctly and for attending classes as scheduled. All course changes must be completed by the end of the day given as the deadline date for add/drop in the College Academic Calendar. Students may register for credit courses after the last day of add/drop only with special permission from the Vice President’s office or appropriate designee.

New students are invited to small group registration dates as determined by NW-SCC each term. All students will be assigned an advisor, which will assist with registration.

Credit Hour Definition and Policy
Northwest-Shoals Community College (NW-SCC) defines a credit hour in accordance with federal regulations 34 CFR 600.2 and the Alabama State Board of Education Policy 705.01: converting Contact Hours to Credit Hour Equivalencies.

The State Board of Education requires institutions to operate on a semester system. Semester hours of credit are then based upon the average number of hours of instruction weekly during a 15-week period, with an hour of instruction defined as not less than 50 minutes of instructor/student contact. A variety of class meeting schedules that fall within this structure may be present within the institutions.

Maximum and Minimum Credit Hour Load
The Northwest-Shoals Community College Academic year is 32 credit hours and the normal credit hour load is 16 to 18 credit hours. Total credit hours above 19 credit hours constitutes a student overload. A student desiring to take more than 19 credit hours must obtain special permission from the Vice President’s office. A maximum load of 24 credit hours may be taken by a student in extraordinary circumstances and only with special permission. No student will be approved for more than 24 credit hours in any one semester for any reason. Students must have a 2.00 GPA or higher to request a course overload. The minimum load for a regular full-time student is 12 hours. A typical student will earn 32 semester hours in two semesters or 16 hours each semester (fall and spring).

Auditing a Course
1. A student who desires to audit a course must be admitted to the College and meet the pre-requisites for that course or have the permission of the instructor;
2. **The student's intent to audit a course must be made at the time of registration.** The Registrar will designate on the class roll that the student is auditing the course. “AU” is assigned upon completion of the course and will appear on the official transcript;

3. The student who audits a course will complete the same course work as students who register for credit with the exception of tests and examinations;

4. Once the grade of “AU” has been established, it will not be changed.

5. The cost of auditing a course is the same as that for taking a course for credit.

**Cancellation of Classes**

Every effort is made to ensure that courses and programs described in the College Catalog are offered to students in an appropriate and reasonable sequence. Students should be aware, however, that admission to the College or registration for a given semester does not guarantee the availability of a specific course. Course availability is determined by student demand and instructor availability. Northwest-Shoals Community College reserves the right to cancel or modify any class scheduled.

**Schedule Changes**

**Adding or Dropping a Course (Add/Drop)**

Students may make schedule changes during the designated Add/Drop period by accessing the myNWSCC portal.

Students may not add classes after the end of the Add/Drop period without approval of the Vice President’s office and the instructor for each course to be added.

Any change to the student’s schedule after Add/Drop must be processed by admissions staff. Students adding a course after the Add/Drop period must pay tuition and fees for the course (or courses) added.

**Withdrawal from a Course**

A student who is unable to complete a course is expected to withdraw from that course by proper withdrawal procedures in the Admissions Office.

A grade of “W” will be assigned for the course, if that withdrawal is prior to the end of the first 60 percent (60%) of the semester. The date at which the 60 percent time frame ends will be published in each semester class schedule. This grade will have no effect on the student’s GPA. The grade of “W” is allowed regardless of the student’s grades to the point of withdrawal. This withdrawal may only be by student request.

Students receiving financial aid should consider the impact of their withdrawal on their financial aid status before withdrawal from a course.

Withdrawal from a class will not be approved after the posted last day to withdraw.

**Withdrawal from College**

A student may initiate withdrawal upon request at any time during the term by obtaining the proper forms from the Admissions Office and completing the forms according to the instructions given. The official withdrawal date will be the date these forms are completed and submitted to the Cashier’s Office on the Shoals or Phil Campbell Campuses.

A grade of “W” will be assigned as the final grade if a student withdraws during the first 60 percent (60%) of the semester. The date at which the first 60 percent time frame ends will be published in each semester class schedule.

Students receiving financial aid should consider the impact of their withdrawal on their financial aid status before withdrawal from College.

**Administrative Withdrawal From a Course or From College**

A student may be withdrawn administratively from any course for:

1. Failure to complete College registration properly.
2. Failure to fulfill a financial obligation to the College.
3. Failure to fulfill conditions of registration in those cases in which a student was admitted on conditions.
4. Failure to fulfill other conditions of admission and/or registration.
5. Failure to meet standards of progress requirements.
6. Failure to attend class during the first week of the semester, if the student is receiving a Federal Pell Grant or Federal Stafford Loan.

**Grading System**

Each course for which a student has registered must be assigned one of the letter grades as follows. The numerical scale applies to all courses except NUR, LPN, and EMS.

<table>
<thead>
<tr>
<th>Grade Definition</th>
<th>Numerical Scale</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent (90-100)</td>
<td>4 points</td>
</tr>
<tr>
<td>B</td>
<td>Good (80-89)</td>
<td>3 points</td>
</tr>
<tr>
<td>C</td>
<td>Average (70-79)</td>
<td>2 points</td>
</tr>
<tr>
<td>D</td>
<td>Poor (60-69)</td>
<td>1 point</td>
</tr>
<tr>
<td>F</td>
<td>Failure (below 60)</td>
<td>0 points</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory</td>
<td>0 points</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory</td>
<td>0 points</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
<td>0 points</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete. Class work must be made up no later than the end of the following semester, or the grade automatically becomes an F.</td>
<td>0 points</td>
</tr>
<tr>
<td>AU</td>
<td>Audit. Course taken for non-credit. Credit hours will not be averaged into the GPA. Must be declared by the end of the registration period and may not be</td>
<td>0 points</td>
</tr>
</tbody>
</table>
changed thereafter.

W Official withdrawal from a course within a 0 points
time period designated by the College,
but not to exceed 60 percent of the semester
time or withdrawal from the College within a
time period designated by the College.
Credit hours will not be averaged into the
GPA.

Satisfactory grades are "A," "B," and "C". While a grade of
"D" is considered passing at the College, senior colleges and
universities may not grant credit for a course in which the
student has made a grade of "D".

A final grade of "I" may be assigned if a student fails to complete
all course requirements because of illness or other extenuating
circumstances that occur near the close of a term which
prevent a student whose performance has otherwise been
satisfactory from completing the requirements of a course.
Unless extenuating circumstances are present, a student’s
failure to submit required work when it is due does not provide
a basis for the grade of "I". In such cases, a grade of "F" is
usually appropriate.

Final Exams

Final exams are administered in all courses. They are to be
given during the dates scheduled or the last scheduled class
meeting for the course. Requests for permission to take
or to give final exams early must be approved by the Vice
President’s Office in writing.

In cases where early exams are permitted, it is expected that all
course requirements will be met and/or appropriate additional
assignments will be completed to account for the time missed.

If a student fails to report for a final exam without known cause,
the grade to be reported should be determined as follows: If
the student has done satisfactory work to that point, a grade of
"I" may be reported on the assumption that the student is ill or
will otherwise present sufficient reason for an official excuse.
If the student’s work has been unsatisfactory to that point, the
grade of "F" should be reported. A grade of "I" automatically
becomes a grade of "F" unless it is removed during the next semester.

Grade Appeal

It is preferred that all grade appeals be handled in an informal
manner between the student and the instructor. If the
discussion between the two does not result in a resolution, a
formal grade appeal may be initiated.

The grade appeal procedure must be initiated by the end of the
drop/add period of the term following the term in which the
grade was awarded. There can be no formal grade appeal for
any grade other than a final grade; however, lab grades, project
grades, tests, and other assignments which may adversely
affect the final grade may be appealed by the student.

Since the first level of appeal is between the student and the
instructor of the course, it is necessary that the student confer
with the instructor to gain understanding of the procedure used
in awarding the grade. Preferably any disagreement will be
resolved at this level. If a resolution is impossible at this level,
the student may make a formal grade appeal to the Division
Chairperson. The student should obtain a form from the Vice
President’s Office to formally request a grade appeal.

Upon completion of the Grade Appeal form, the student
should return the form to the Vice President’s Office. The Vice
President’s Office will then inform the Division Chairperson of
the appeal and will request that the Chairperson meet with the
student to discuss the problem. If the matter can be resolved
at this level, it should be done in writing on the Grade Appeal
form. If no resolution is reached, the student will meet with the
Grade Appeal Committee. This committee is selected by the
Division Chairperson to hear this appeal only. (If the Division
Chairperson is the instructor of the course, the Vice President
will appoint another Division Chairperson to handle the Grade
Appeal Committee.)

The committee will be headed by the Division Chairperson or
his/her designee and will consist, if possible, of at least one
faculty member from the discipline of the course in dispute. All
committees should consist of no fewer than three faculty
members. The committee will be objective and even-handed
as it reviews the grade appeal.

The committee may request any documentation necessary
from the student and/or the instructor. The committee will
interview the student and may wish to interview the instructor.
Based on the findings from the information and the interview,
the committee will make a formal recommendation to the Vice
President of Instruction.

The Vice President’s Office may accept the recommendation,
request further information, or reject the committee’s
recommendation. In all cases, the Vice President’s Office will
inform the student in writing of the findings.

Class Attendance Policy

Because class attendance is considered to be essential to the
accomplishment of course objectives, excessive absences,
more than 20% of the class meetings for a course, are
discouraged. These absences also include any absences
accrued during late registration. Failure to adhere to the
20% policy may result in a failing grade based on academic
performance. Any variation of this policy must be approved
through the Vice President’s Office. A student who is absent
due to required participation in a school activity must be
allowed to make up work according to guidelines issued by
individual instructors.

Attendance for distance education courses may be determined
by course work completed in Moodle or other software. This
may include discussion postings, quizzes, or other assignments
as noted by the course instructor. Instructors
have access to detailed course logs to track student activity
in distance courses.

Excused Absences

The only excused absences that the College recognizes are
absences from classes due to students representing the
College in some official capacity such as a scholarly
competition sponsored by the College or attending documented
required military duties. Absences are excused only with
written permission of the Vice President’s Office. Students are
responsible for making prior arrangements for class
assignments.
The Semester System

The academic year is divided into two semesters of approximately sixteen weeks and a summer term of eleven weeks. Credit is awarded based on standard criteria of hours students receive instruction in a semester.

Quality Points and Grade Point Average - (GPA)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

The student's scholastic standing or GPA is obtained by dividing the total number of quality points earned by the total number of semester hours attempted for which the grades of A, B, C, D, or F are assigned.

Standards of Academic Progress: General

Required GPA levels for students according to number of hours attempted at the College.

A student will attain clear academic status provided he or she:

1. Attempts 12-21 credit hours and maintains a 1.5 GPA or above.
2. Attempts 22-32 credit hours and maintains a 1.75 GPA or above.
3. Attempts 33 or more credit hours and maintains a 2.0 GPA or above.

DEFINITION OF TERMS:

Grade Point Average (GPA) - Using a 4-point scale, the grade point average based on all hours attempted during any one semester at the College.

Cumulative Grade Point Average (GPA) - Using a 4-point scale, the grade point average based on all hours attempted at the College.

Clear Academic Status - The status of a student whose GPA is at or above the level required by this policy for the number of credit hours attempted at the College.

Academic Probation - The status of a student whose Cumulative GPA falls below the level required for the total number of credit hours attempted at the College or the status of a student who was on Academic Probation the previous semester and whose Cumulative GPA for that semester remained below the level required for the total number of credit hours attempted at the College but whose GPA for that semester was at least 2.0.

One Semester Academic Suspension - The status of a student who was on Academic Probation the previous semester but who has never been suspended or who, since suspension, had achieved Clear Academic Status and whose Cumulative GPA that semester was below the level required for the total number of credit hours attempted at the College and whose GPA for that semester was below 2.0.

One Year Academic Suspension - The status of a student who was on Academic Probation the previous semester and who had been previously suspended without since having achieved Clear Academic Status and whose Cumulative GPA that semester remained below the level required for the total number of credit hours attempted at the College and whose GPA for that semester was below 2.0.

Appeal of Suspension - The process by which the College shall allow a student suspended for one semester or one year (whether "native" student or a transfer student) to request readmission without having to serve the suspension.

Intervention for Student Success

When a student is placed on academic probation, one-semester academic suspension or on one calendar year academic suspension, college officials may provide intervention for the student by taking steps including, but not limited to, imposing maximum course loads, requiring a study skills course, and/or prescribing other specific courses.

Application of Standards of Progress:

1. When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the College, the student's status is Clear.
2. When a student's Cumulative GPA is below the GPA required for the number of credit hours attempted at the College, the student is placed on Academic Probation.
3. When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the College but the semester GPA is 2.0 or above, the student remains on Academic Probation.
4. When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the College and the semester GPA is below 2.0; the student is suspended for one semester. The transcript will read SUSPENDED-ONE SEMESTER.
5. The student who is suspended for one semester may appeal. If, after appeal, the student is readmitted without serving the one semester suspension, the transcript will read SUSPENDED-ONE SEMESTER/READMITTED UPON APPEAL. The student who is readmitted upon appeal re-enters on Academic Probation.
6. A student who is on Academic Probation after being suspended for one semester (whether the student has served the suspension or has been readmitted upon appeal) without having since achieved Clear academic status and whose Cumulative GPA falls below the level required for the total number of hours attempted at the College but whose semester GPA is 2.0 or above will remain on Academic Probation until the student achieves the required GPA for the total number of hours attempted.
7. A student returning from a one semester or one-year suspension and while on academic probation fails to obtain the required GPA for the number of hours attempted and fails to maintain a semester GPA of 2.0 will be placed on a one year suspension.
8. A student may appeal a one-semester or a one-year suspension. The permanent student record will reflect the student's status (except when the status is clear).
When appropriate, the record will reflect **ACADEMIC PROBATION, ACADEMIC SUSPENSION-ONE TERM, ACADEMIC PROBATION-ONE YEAR, ONE TERM SUSPENSION-READMITTED ON APPEAL, or ONE-YEAR SUSPENSION-READMITTED ON APPEAL.**

**Process for Appeal for Readmission**

If a student declares no contest of the facts leading to suspension but simply wishes to request consideration for readmission, the student may submit a request in writing for an "appeal for readmission" to the Assistant Dean no later than the close of open registration (see College Catalog or Semester Course Schedules for dates). During the meeting of the Admissions Committee, which shall not be considered a "due process" hearing but rather a petition for readmission, the student shall be given an opportunity to present a rationale and/or statement of mitigating circumstances in support of immediate readmission. The decision of the Admissions Committee, together with the materials presented by the student, shall be placed in the College's official records. Additionally, a copy of the written decision shall be provided to the student. Equity, reasonableness, and consistency should be the standards by which such decisions are measured. If the student is readmitted without serving the one-semester suspension or the one-calendar-year suspension, the transcript will read SUSPENDED-ONE SEMESTER or ONE YEAR/READMITTED UPON APPEAL.

**Standards of Academic Progress:**

**Transfer Students**

1. A transfer student who is admitted on Clear academic status is subject to the same standards of academic progress as a "native" student. Grades accrued at other regionally accredited postsecondary institutions are not included in GPA calculation.
2. A transfer student who is admitted on Academic Probation retains that status until the student has attempted at least 12 credit hours at the College. If at the conclusion of the term in which the student has attempted a total of 12 or more credit hours at the College the Cumulative GPA is below 1.5, the student is suspended for one term. The transcript will read SUSPENDED—ONE SEMESTER.
3. If, at the conclusion of the semester in which the transfer student admitted on Academic Probation has attempted a total of 12 or more credit hours at the College the Cumulative GPA is 1.5 or above, the student's status is Clear.

**Course Repetition Policy**

Any course for which the student has previously registered may be repeated. When a course is repeated, only the last grade awarded is included in calculating the Cumulative GPA for graduation purposes. However, a course may be counted only once toward fulfillment of credit hours for graduation.

**Course Forgiveness Policy**

If a student repeats a course, the last grade awarded (excluding grades of W and WP) replaces the previous grade in the computation of the Cumulative GPA. The GPA during the semester in which the course was first attempted will not be affected (The initial grade is not removed from the transcript).

When a course is repeated more than once, all grades for the course - excluding the first grade - will be used in computation of the Cumulative GPA. Official records at the College will list each course in which a student has enrolled.

It is the student’s responsibility to notify the Registrar of a repeated grade since recognition of a repeat grade is not automatic.

**NOTE:** Nursing and other programs may have special provisions for course repetition as approved by the Chancellor. Students planning to transfer to another institution should contact that institution regarding this policy.

**Academic Bankruptcy Policy**

1. A student may request in writing to the Registrar to declare academic bankruptcy under the following conditions:
   (a) If fewer than three (3) calendar years have elapsed since the term for which the student wishes to declare bankruptcy, the student may declare academic bankruptcy on all coursework taken during that one term provided the student has successfully completed a minimum of 30 quarter or 18 semester credit hours of coursework at the College since the bankruptcy occurred. All coursework taken, even hours completed satisfactorily, during the term for which academic bankruptcy term is declared will be disregarded in the Cumulative GPA;
   (b) If three (3) or more calendar years have elapsed since the most recent term for which the student wishes to declare bankruptcy, the student may declare academic bankruptcy on all coursework taken during 1-3 terms, provided the student has taken a minimum of 30 quarter or 18 semester credit hours of coursework at the College since the bankruptcy term occurred. All coursework taken, even hours completed satisfactorily, during term(s) for which academic bankruptcy is declared will be disregarded in the Cumulative GPA.
2. When academic bankruptcy is declared, the term “ACADEMIC BANKRUPTCY” will be reflected on the transcript for each term affected. When academic bankruptcy is declared, the transcript will reflect the term of its implementation and the transcript will be stamped “ACADEMIC BANKRUPTCY IMPLEMENTED.”
3. A student may declare academic bankruptcy only once.
4. Implementation of academic bankruptcy at the College does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institutions.

**Student Records Policy**

As provided by Public Law 93-380, Protection of Rights of Privacy of Parents and Students, Northwest-Shoals Community College maintains information about students which facilitates the educational development of the student and the effective administration of the College in order to guarantee the rights of privacy and access as provided by the Family Educational Rights and Privacy Act of 1974 (FERPA). The College has formulated the following policies and procedures:
A. General Policy

It is the policy of Northwest-Shoals Community College that all student records are maintained for five years after the student graduates or leaves the institution. Records are then stored in a fireproof alphabetical filing system in the records room at each campus and only the official permanent record (official application for admission, official transcript containing grades and credit and other official transcripts/GED) is maintained. Other information contained in the student record is destroyed in keeping with the State Record Manual published by the Alabama Department of Archives and History, Montgomery, Alabama. No information from records, files, or other data directly related to a student other than public information defined below shall be disclosed to individuals or agencies outside the College without the written consent of the student except pursuant to a lawful subpoena or court order or except in the case of educational or governmental officials as provided by law. Information contained in such records may be shared within the College.

Students shall have access to all such information with the exceptions set out below in accordance with the procedure outlined within this policy statement.

B. Definition of Student

For the purpose of this policy, a “student” is defined as “any individual currently or previously enrolled in any course(s) offered by the College.”

C. Definition of Educational Records

Student educational records are defined as those records, files, documents, and other material which contain information directly related to students. Records of instructional, supervisory, and administrative personnel which are the sole possession of the maker and accessible only to the maker or a substitute are specifically excluded from this definition of educational records.

Records which are made or maintained by institutional counselors or other professionals or paraprofessionals, and which are maintained in connection with personal treatment or personal counseling and are not available to anyone not involved officially within the College are also excluded from a student’s educational records. Such records, however, are available to a physician or appropriate professional of the student’s choice, if requested.

D. Public Information

The following is a list of public information which may be made available by the College without prior consent of the student and is considered part of the public record of the student’s attendance:

1. Student’s name
2. Student’s address (local and permanent)
3. Student’s telephone number
4. Date and place of birth of student
5. Major field of study
6. Student’s participation in officially recognized activities, clubs, organizations, and weight and height of members of athletic institution teams
7. Dates of attendance of student
8. Degrees and awards received by student
9. The institution most recently previously attended by the student

If any student has an objection to any of the aforementioned information being released during any given term or academic year, the student should notify, in person or in writing, the Assistant Dean.

E. Location of Individuals Responsible for Student Records

The College has designated the following officials as being responsible for students’ records within their respective areas:

Assistant Dean - The Assistant Dean will see that all students upon acceptance to the institution will have an individual student record file containing all admissions criteria needed for acceptance to the institution. The Assistant Dean is charged with the responsibility of continuously maintaining all students’ files in a safe and orderly manner, updating all records needed on the individual student, and maintaining an adequate backup system for all student records.

Chief Fiscal Officer - The Chief Fiscal Officer will have the responsibility of seeing that all provisions as set forth in this policy are applied to the release of financial information concerning individual students.

F. Disclosure of Student Records to the Student

The student is accorded the right to inspect in the presence of the proper official as stated in section “E” of this policy statement records, files, and data primarily and directly related to the student. In order to inspect one’s file, the student should go to the office of the appropriate official, present a valid photo identification, and initiate a written request. If the named student cannot personally appear, the student must submit a notarized request to the appropriate official. The request for inspection shall be granted by the College within forty-five (45) days of the time of the receipt. If in the opinion of the appropriate official inspection can reasonably be accomplished only by providing copies of documents, such copies shall be made and provided to the student. The right of inspection does not include financial statements of parents, confidential recommendations placed in the file prior to January 1, 1975, other confidential recommendations, nor access to items waived by the student in accordance with paragraph H.

G. Challenging the Contents of the Record

The College will respond to any reasonable request for an explanation or interpretation of any item in a student’s file. Requests for such explanation or interpretation should be addressed in writing to the appropriate official.

If after inspecting a record a student wishes to challenge any part of the file’s content, a written request for a hearing should be addressed to the President, who will set a date and time for the hearing within forty-five (45) days of receiving the written request.
The request for a hearing should identify the item or items in the file to be challenged and state the grounds for challenge, i.e., inaccuracy, misleading nature, inappropriateness. The President with the appropriate records official as stated in section E shall examine the contested item(s) in the file and shall examine any documents or hear any testimony the student wishes to present. The President and the records official may decide that the items should be retained or that they should be deleted or altered. There may be a decision that the material is accurate and appropriate but that the student should be allowed to place a written explanation in the file. The President shall issue a written decision within ten (10) days of the conclusion of the hearing.

H. Waiver of Access

The College may request that a student waive his/her right to inspect confidential recommendations regarding that student’s application for admission, application for employment, the receipt of an honor, or other recognition. If a student receives a request for waiver, the student may sign and return the waiver, may request a list of names of persons who will be asked for recommendations before signing, or may refuse to waive the right to access.

Such a waiver shall not be a condition for admission to the institution, financial aid assistance, or any other benefits received by students at the College.

I. Providing Records to Third Parties

The general policy of the College is to refuse access to a student’s records to third parties without the written consent of the individual student. Should a student wish to have such records released, a written request must be directed to the proper official specifying the records to be released, the person to whom records are to be released, and a request for copies to the student if desired. The College will then transfer or grant access to the information. The established service fee for producing photocopies of records will be assessed against the person whose record is involved.

Transcripts are not provided for noncredit courses. A student’s records may be available to the following persons under conditions noted without written consent of the student:

1. School officials including administrators, instructors, department heads, counselors, and staff designated by such persons within the College who have a legitimate educational interest.

2. Official representatives of federal departments or agencies, or state education authorities for purpose of audits, evaluative studies, etc. Data collected will be protected to prevent personal identification except when specifically authorized by federal law. The data or copies that may be on file at the College will be destroyed when no longer needed.

3. Financial aid officers when such information is relevant to financial aid needs analysis or other aspects of determining and/or renewing financial assistance to the individual student.

4. Release of educational records of deceased students may only be released to the student’s parents or the executor/executrix of the deceased student’s estate.

A record of requests for access, the legitimate interest involved, and action taken will be placed in the student’s file for all requests of the file except those from school officials as noted in paragraph one above. Inspection of individual student records other than by the personnel noted in paragraph one above will be supervised by the appropriate official or designee. The student’s record shall not be taken from the designated official’s office area.

5. Officials of other educational or governmental agencies based on the case of need.

J. Student Issued Records

The Records Office must have a written request from the student to receive a personal copy or to have a transcript sent to another college, agency, place of employment, etc. OFFICIAL copies of transcripts must be mailed by the Records Office. An unofficial copy is defined as a copy that does not bear the official seal of the College but is otherwise a true copy when released by the College records official. Records officials will not copy or otherwise reproduce copies of official student transcripts and other information obtained from transfer students as official transcript requirements.

The Records Office honors FAX requests to send official transcripts to third parties and will accept FAX transcripts for advising purposes only. The following information is needed to process your request.

1. Full Name (maiden/other names)
2. Date of birth
3. Social Security Number or Student Number
4. Approximate dates of attendance at Northwest-Shoals Community College
5. Complete mailing address to whom the transcript is to be released
6. Signature required and photo ID
7. Official transcripts cannot be faxed

Official transcripts request are processed as they are received. REQUEST SHOULD BE MADE AT LEAST TWO WEEKS BEFORE THE TRANSCRIPTS ARE NEEDED.

The College reserves the right not to release a transcript if the student has outstanding financial obligations to the College or disciplinary action.

Students who have ceased attendance or who have graduated from the College have basically the same FERPA rights as students currently attending.

K. Changes in the Policy

This policy statement is subject to change by additional federal regulations or court decisions that may modify and/or negate any portion of the regulations in Public Law 93-380. This statement of policy will be published in the future in appropriate college publications. To provide additional notice of the policy, copies will be posted on bulletin boards on all campuses of the College.
Credit from Non-Traditional Sources
The College provides an opportunity for students to earn a reasonable amount of credit toward the associate degree through methods other than formal classroom instruction.

While non-traditional credit applies toward degrees granted by the College, it should not be assumed that such credit will automatically be accepted by other institutions. Students are advised to consult a counselor to obtain information regarding policies at other institutions. A maximum of 25 percent of credit toward any degree may be earned from non-traditional sources.

The types of non-traditional credit and procedures are listed below:

A. Course Credit by Departmental Challenge Examination

Students may be awarded credit for documented competencies and previous formal training by demonstrating their competencies on departmental challenge exams. These departmental exams are generally used as credit for experience or as credit earned in programs at area vocational schools. These departmental exams are not available for core courses in Associate in Arts or Associate in Science degrees.

The guidelines and procedures for obtaining credit by departmental examination are:

1. The maximum number of semester hours a student can challenge is 9.
2. A student may not challenge a lower level course in a sequence in which he/she has passed a higher level course in the sequence.
3. A student cannot challenge a course he/she has already completed.
4. Prerequisites for a course must be completed before the course may be challenged.
5. A course may be challenged only once.
6. The student must register and pay for the course he/she is planning to challenge.
7. The student must make arrangements within the first five (5) HOURS of class meeting time (i.e. within first week for a M-F class; within the first two (2) class meetings for M-W or T-TH classes) with the division chairperson to challenge a course.
8. The student must attend class until the results of the challenge examination are determined.
9. The challenge examination results should be made known to the student within three (3) school days of the administration of the examination (to allow for schedule alteration if desired and possible).
10. A student cannot withdraw from the class after taking the challenge exam.
11. The challenge examination grade will serve as the course grade. The student may remain in the challenged course and complete the course for a second course grade. If this occurs, the instructor will complete a change of grade form reflecting the new grade. This will replace the earlier grade on the student’s transcript.

12. Challenge examinations will be constructed by full-time faculty teaching within the challenged area; securely maintained in the division office; administered by the division office; and graded on a rotating basis by full-time faculty teaching in the area challenged.

For more information, contact the appropriate divisional chairperson.

B. Specialized Military Training

The College adheres to policies prescribed by the “Guide to the Evaluation of Educational Experiences in the Armed Services” in granting credit for military course work. The student should consult the Director of Admissions for information regarding the type and amount of credit which can be granted. United States Armed Forces Institute (USAFI/DANTES) Credit earned under the auspices of USAFI/DANTES may be granted by the College. The policy which applies to the CLEP program also applies to USAFI/DANTES credit. Consult the Director of Admissions for a full evaluation of USAFI/DANTES credit.

C. Advanced Placement

Students who have completed college-level courses offered by high schools through the CEEB Advanced Placement Program and who have passed the National Examinations of the CEEB Advanced Placement Program with a score of three (3) or higher will be awarded advanced placement credit in the equivalent courses at the College. Advanced Placement scores must be received for CEEB after the student applies for admission but prior to the beginning of the semester in which the student wants the credit to be applied. It is the student’s responsibility to have the College Entrance Examination Board forward reports to the College Office of Admissions. The student should be aware that some universities may require a score of four (4) for advanced placement. Acceptance of a score of three (3) by the College will not assure that the senior institution will award advanced credit for the course credit through advanced placement by the College. A maximum of 20 semester hours credit may be awarded by state community and junior colleges.

D. Articulated Credit

Articulation is a planned process that allows a high school student enrolled in certain Occupational/Technical Programs, the opportunity to progress from secondary to postsecondary in a sequential manner without duplication of instruction. Students may receive up to one semester of postsecondary course credit for skills and theory received at a high school. Applicants seeking credit transfer from high school should contact the Occupational Program Instructor or contact the Admissions Office at the College for specific instructions.

E. College Level Examination Program (CLEP)

(CLEP) is a National System of credit by examination. The College is an open test center. The College honors credit earned through CLEP examinations.
provided appropriate scores are achieved, and certain conditions are met. A minimum score at or above the 50th percentile on both general examinations and subject examinations is required for specific course credit.

Any elective credit earned by nontraditional means may apply toward the total number of hours required for graduation but may not apply toward specific requirements in particular subject area. For example, elective credit in English will not meet degree requirements of composition or literature.

Credit for SUBJECT EXAMINATIONS is granted provided the student has not been enrolled for more than one week in the course for which credit is to be earned. CLEP credit is not granted for college level courses previously failed, for courses in which credit for higher level course work has been earned, or for both subject examination and its course equivalent.

The policy of granting credit through CLEP at the College may differ from policies at other colleges. CLEP Tests are administered by appointment. Tests will not be scheduled during final exams or during official registration dates. For more information, contact Carolyn Fincher, Phil Campbell Campus at 256.331.6297 or go to www.collegeboard.com/clep

F. Biology Placement Examination

The state of Alabama has developed a Placement Exam for the Biology Department. The exam is an internet based 75-question, multiple choice placement test which covers the objectives of BIO 103. Students who must take BIO 104 to satisfy degree requirements will not be allowed to substitute the test for the BIO 103 pre-requisite course.

A student who passes this examination may proceed directly to BIO 201. For information on this exam, contact the Science Department Chairperson or the Division Chairperson.
### “CLEP” Subject Examinations (50th Percentile)

<table>
<thead>
<tr>
<th>Examinations</th>
<th>Score</th>
<th>Course Equivalencies and Credit Awarded</th>
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<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>POL SCI 211</td>
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<tr>
<td>American History I</td>
<td>50</td>
<td>HIS 201</td>
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<tr>
<td>American History II</td>
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<td>HIS 202</td>
</tr>
<tr>
<td>American Literature</td>
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<td>ENG 251, 252</td>
</tr>
<tr>
<td>Biology</td>
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<td>BIO 103</td>
</tr>
<tr>
<td>Calculus with Elementary Functions</td>
<td>50</td>
<td>MTH 125</td>
</tr>
<tr>
<td>College Algebra</td>
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<td>MTH 115</td>
</tr>
<tr>
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<td>CIS 146</td>
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<td>Developmental Psychology</td>
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<td>ENG 261, 262</td>
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<td>General Psychology</td>
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<td>PSY 200</td>
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<tr>
<td>Introduction to Business Management</td>
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<td>BUS 275</td>
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<tr>
<td>Introduction to Accounting</td>
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<td>BUS 241</td>
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<tr>
<td>Introduction to Business Law</td>
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<td>BUS 263</td>
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<tr>
<td>Introduction to Macroeconomics</td>
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<td>Introduction to Microeconomics</td>
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<td>ECO 232</td>
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<td>Introduction to Micro and Macro</td>
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<td>Introduction to Marketing</td>
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<td>BUS 285</td>
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<tr>
<td>Introduction to Sociology</td>
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<tr>
<td>Spanish I</td>
<td>50</td>
<td>SPA 101</td>
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<td>Spanish II</td>
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<td>Western Civilization I</td>
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<td>HIS 101</td>
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<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>HIS 102</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>BUS 275</td>
</tr>
</tbody>
</table>

### Honors

The College recognizes scholastic achievement by publishing the President’s List and the Dean’s List at the end of each regular semester.

The President’s List includes the names of students carrying twelve or more hours who have a GPA of 4.0. Developmental courses carrying grades of A-F will be calculated in the term GPA, but will not count toward the minimum course load requirement for honors purposes.

The Dean’s List includes the names of students carrying twelve or more hours who have a GPA of 3.5 or above but below 4.0. Developmental courses carrying grades of A-F will be calculated in the semester GPA but will not count toward the minimum course load requirement for honors purposes.

### Academic Honors Upon Graduation

Academic honors will be awarded annually to the three students achieving the highest Cumulative GPA as follows:

- Highest Academic Achievement in a Degree Program
- Highest Academic Achievement in a Certificate Program

These awards can be presented only to students having a GPA of 3.75 or higher on all college work. Awards for certificate programs will be made only for programs which are one year or longer. Duplicate awards will be made if necessary.

The attainment of the following Cumulative GPA at the end of the spring term prior to spring graduation entitles the graduating students to honors at the Honor’s Day Program.

### Graduation Honors for Degrees

Superior academic achievement by graduating students shall be recognized by the following designations on transcripts:

- Graduation with Highest Honors (or Summa Cum Laude) .................. 3.90 to 4.00 GPA
- Graduation with High Honors (or Magna Cum Laude) ...................... 3.70 to 3.89 GPA
- Graduation with Honors (or Cum Laude) ................................... 3.50 to 3.69 GPA

### Graduation Honors for Certificates

Graduation with Distinction .................................................. 3.5 to 4.00 GPA

NOTE: Calculation of the GPA for graduation honors shall be identical to that method used to calculate the GPA to fulfill graduation requirements for the degree, diploma, or certificate being earned. In addition, in order to be eligible for a graduation honor, the student must have completed a minimum of 32 semester credit hours of college-level courses at the College.
Graduation Requirements

The College awards the Associate in Arts, the Associate in Science, the Associate in Applied Science, the Associate in Occupational Technology Degrees, or Certificates for non degree programs.

Degrees

The Associate in Arts and the Associate in Science degrees are awarded to students who complete planned university parallel programs and the General Education Minimum Requirements as outlined in this catalog.

A majority of the Associate in Arts and Associate in Science Degree Programs are designed for those students who plan to transfer to four-year institutions to pursue programs of study requiring little specialization on the freshman and sophomore levels. Substitutions to degree requirements in these programs are possible to afford maximum course transfer to a specific institution. All substitutions must be recommended by the advisor and approved by the appropriate Department Head or Division Chairperson and the Vice President’s Office.

The Associate in Applied Science Degree is awarded to students who satisfy the requirements of a specific career, technical, or occupational degree program as outlined in this catalog.

The Associate in Occupational Technology Degree may be awarded to students who satisfy the requirements in both a primary and secondary technical specialty.

Degree Requirements

1. Meet program requirements. Each student will determine program requirements from the College catalog. (Students who maintain continuous enrollment excluding summer term may elect either to meet graduation requirements specified in the original catalog in effect when they entered, or they may elect to meet graduation requirements listed in the catalog in effect at the time for graduation. Students who do not maintain continuous enrollment may use the catalog in effect at the point of readmission or the one in effect at the time for graduation to determine graduation requirements.)

2. Earn a Cumulative GPA of 2.0 in all courses attempted at the College. The calculation of the GPA for graduation shall not include grades earned in “institutional only” credit courses. When a course (other than one which can be repeated for credit) has been repeated, only the most recent attempt will be used in calculating the Cumulative GPA for graduation. However, a course may be counted only once for purposes of meeting graduation requirements unless specifically noted in the course description.

3. Complete at least 25 percent (25%) of degree requirements at the College. Transfer students who are admitted on probation must complete at least 30 hours at the College.

4. Clear all procedural, operational, and financial obligations to the College.

Occupational and General Certificate Requirements

Graduation requirements for certificate programs are the same as those described for degrees with the exception of Item 2. In order to graduate from certificate programs, students must complete all program requirements as outlined. Course substitutions are made only with the approval of the Department Head or Division Chairperson and the Vice President’s Office.

Multiple Degrees or Certificates

Students may receive more than one degree or certificate with the following stipulations:

1. Only one transfer degree (Associate in Arts - AA or Associate in Science - AS) will be awarded;

2. All program-specific courses must be completed for each Associate in Occupational Technology Degree and each Associate in Applied Science Degree awarded. Required general education courses (orientation, English, Speech, math, science, etc.) may be used for multiple degrees.

3. The cost for reprinting a degree will be $17.50.

Graduation

When a student meets the required number of hours for his or her program of study, the student will automatically be graduated. The degree or certificate will be reflected on the student’s transcript. Students who have graduated will receive a printed copy of the award.

Any questions regarding graduation should be directed to Mark Simpson at 256.331.5435.

Reverse Transfer

Northwest-Shoals Community College (NW-SCC) has partnered together with the University of North Alabama (UNA) and Athens State University to allow students to complete their community college degree program by the reverse transfer of college credits from UNA or Athens State University. The hours from NW-SCC and UNA or Athens State University are applied to both the associate and baccalaureate degree programs in accordance with the policies of each institution. There is no cost for participating in the reverse transfer program.

All paperwork for the associate degree will be completed by NW-SCC. Any questions may be directed to Mark Simpson at 256.331.5435.
Plans of Study
Methods of Course Delivery

Off-Campus College Sites

The College may offer courses at off-campus locations. Through off-campus classes, students may pursue a college degree or expand their base of knowledge without driving long distances. See current class schedule for times and sites. Students use library services from the Shoals and the Phil Campbell Campuses. A needs assessment survey will be completed by off-campus students each semester to determine how the College may improve its services. Contact the Distance Education Office at 256.331.5395.

Videoconference System

The College provides two-way, interactive videoconferences, workshops, and courses through videoconferencing equipment. This system was set up to enable selected Alabama public educational institutions to share resources and to communicate quickly and easily from site to site. The system transmits college courses at the graduate and undergraduate levels, academic meetings, business conferences, technical training, continuing education courses and workshops. The videoconference system enables users at multiple locations to interact as if they were all in the same room. All conference participants see and hear other participants through video monitors.

The College has several videoconference classrooms located on both campuses.

Since videoconference students attend class on-campus, registration and access to student services and other resources is the same as for all other on-campus students. Videoconference students do not have to complete the distance education orientation.

Distance Education

Through distance education, the College is reaching beyond its campus into homes and workplaces to help students overcome the obstacles of time, geography, and career commitments. Distance education courses are based on the same instructional outcomes and objectives as on-campus courses.

Teleweb courses, web courses, and blended courses are offered by the College. These courses are listed in the class schedule each semester.

**TELEWEB COURSES** - Teleweb courses are a combination of Internet-based online instruction and streaming video or DVD.

**WEB COURSES** - Web courses offer online instruction delivered through the Internet directly to the student’s computer or mobile device. Students receive instruction, interact with instructors, and complete lessons via the Internet.

**BLENDED COURSES** - Blended courses require students to come on-campus for certain activities such as labs, presentations, or speeches. Students complete the lecture portion of the class online without coming to campus.

Students may complete several degree programs by taking distance education courses. Those degrees are noted under the Plans of Study and the individual program pages of the catalog.
Plans of Study

Industrial Systems Technology
A/C and Refrigeration Option
Electrical Option
Injection Molding Technology
Mechanical Option
Medical Assisting Technology
Office Administration
Accounting Option
Administrative Professional Option
Clinical Option
Registered Nursing
Salon and SPA Management
Esthetics Option
Cosmetology Option

Associate in Science Degree

Pages 46-59

*Business Administration
*Child Development
Computer Information Systems
Environmental Health & Safety
*General Education
Fire Science/Fire Service Management
Medical Technology
Pre-Chemical Laboratory Technician
Pre-Computer Science
Pre-Criminal Justice
Pre-Dentistry
Pre-Engineering
Pre-Environmental Biology
Pre-Environmental Science
Pre-Financial Planning & Counseling
Pre-Health, Physical Education and Recreation
Pre-Industrial Hygiene
Pre-Medicine
Pre-Nursing (B.S.N.)
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary Medicine
Water & Wastewater Management & Technology

Career Degrees Plans

Pages 60-106

Associate in Applied Science Degree

Child Development
Computer Information Systems Technology Programming Option
Personal Computer Systems Option
Criminal Justice
Design Engineering Technology
Electronics Technology
Emergency Medical Services
Environmental Health and Safety Technician

Short-Term General Certificates

Basic Automotive Collision Repair Basic Automotive Service Technology
Advanced Automotive Service Technology
Biomedical Equipment Technology

1 Program is under review for continuation. Courses will be offered as needed.
2 Allied Health Linkage - Students must transfer to Wallace State/Hanceville to complete the program and receive a degree.
3 Associate in Occupational Technology - Students must see an advisor for selection of approved primary and secondary technical areas of study.
4 Short-Term General Certificate programs are less than 27 semester hours. Career Certificate programs are completed within one to two years.
5 These programs do not require a high school diploma or GED certificate for admission.

* Degrees may be completed by taking distance education courses.
Plans of Study

General Education/University Transfer
The College is authorized to award the Associate in Arts and Associate in Science degrees for students planning to transfer to a four-year college or university. The transfer guides listed on the following pages can be used by students to determine what courses should be taken while at NWSCC. A student who plans to transfer to a senior institution should obtain the current catalog of that institution to use as a check sheet in fulfilling freshman and sophomore course requirements of that institution. All A.A. or A.S. transfer guides may be adjusted to the student’s needs so long as the “General Education Core: requirements specified are met and the program follows a specified university-parallel program.

The College lists specific pre-professional and other university-parallel transfer guides in this catalog; however, not listed are many pre-professional and university programs which the College offers through special planning. A student in consultation with an academic advisor usually can develop an educational program using the current catalog that parallels the first two years of the program of the four-year institution to which the student plans to transfer. In a few instances, one or two specialized courses may not be taught, but the student can substitute electives that may fulfill the requirements of the institution to which the student will transfer. In summary, individual guides can be produced to meet the needs of the transfer student.

Entering students should be aware that it is quite common that a student will need to take additional pre-requisite courses. For example, the appropriate beginning course in mathematics or English will be determined by placement scores and high school preparation; the beginning course in Computer Information Systems program will depend on the prior experience of the student in computers and mathematics. A student may be required to enroll in a reading course prior to some college courses.

Every effort is made to ensure that the courses and programs described in this catalog are offered to students in an appropriate and reasonable sequence. Students should be aware, however, that admission to the College or registration for a given semester does not guarantee the availability of a specific course or a program of courses that may be under review for continuance. Availability of courses and programs is determined by student demand, instructor availability, and periodic program reviews. Whenever a program is determined to have insufficient numbers to continue institutional support, students currently enrolled will, whenever possible, be given notification of the decision and sufficient time to complete the program with continuous enrollment. If new students are enrolled after this decision, they will be advised of the tentative status of the program and their potential inability to complete the program at this institution.

STARS (Alabama Articulation Program)
The Alabama Articulation Program (also called STARS – Statewide Articulation Reporting System) is a computerized articulation and transfer planning system designed to inform students who attend Alabama Community Colleges about degree requirements, course equivalents, and other transfer information pertaining to specific majors at each state funded four-year institution. Students planning to transfer to an Alabama public senior institution should print and retain the Transfer Guide for their major along with the transfer institution’s Area V courses. Failure to follow this guide may result in courses not being transferable. It is the student’s responsibility to become familiar with the requirements of the intended transfer senior institution. Students interested in receiving a STARS Transfer Guide should visit the STARS web site at http://stars.troy.edu or contact their advisor.
**Associate in Arts and Associate in Science Degrees**

**Associate in Arts Transfer Guides**

- Art .......................................................... 240101 ART
- General Liberal Arts ...................................... 240101 GLA
- Music .......................................................... 240101 MUS
- Pre-Law .......................................................... 240101 LAW
- Teacher Education
  - Pre-Elementary Education ......................... 240101 EED
  - Pre-Secondary Education ......................... 240101 ESD

**Associate in Science Transfer Guides**

- Business Administration ................................. 240102 BUA
- Child Development ........................................ 240102 PEC
- Pre-Computer Science .................................... 240102 CS
- Environmental Health & Safety ....................... 240102 ENV
- General Education ........................................ 240102 GEN
- Fire Science/Fire Service Management ............. 240102 FSM
- Medical Technology ...................................... 240102 MT
- Pre-Chemical Laboratory Technician ............... 240102 CLT
- Pre-Criminal Justice .................................... 240102 PCJ
- Pre-Dentistry .............................................. 240102 DEN
- Pre-Engineering ........................................... 240102 ENG
- Pre-Environmental Biology ............................. 240102 EB
- Pre-Environmental Science ............................ 240102 ES
- Pre-Financial Planning & Counseling ............... 240102 FIN
- Pre-Health, Physical Education and Recreation .. 240102 HPR
- Pre-Industrial Hygiene ................................. 240102 IH
- Pre-Medicine ............................................... 240102 MED
- Pre-Nursing (B.S.N.) ................................... 240102 BSN
- Pre-Optometry ............................................. 240102 OPT
- Pre-Pharmacy .............................................. 240102 PHA
- Pre-Physical Therapy .................................... 240102 PPT
- Pre-Veterinary Medicine ............................... 240102 VET
- Water & Wastewater Management & Technology .. 240102 WWT

The Associate in Arts and Associate in Science degrees require a minimum of 61 semester hours credit for completion. These degrees are essentially planned sets of general education courses that make up the first half of a four-year baccalaureate degree. Thus, Associate in Arts and Associate in Science degree students do not officially major in an academic discipline at the College. Majors are actually defined by the institutions to which these students transfer. However, Associate in Arts and Associate in Science degree students are assigned to an advisor on the basis of an intended major or a field of interest indicated by individual students. Transfer guides have been outlined in the catalog to guide students in the choice and sequence of particular courses.

**Note 1:** The specific courses are suggested for graduation and transfer requirements. Students should consult the requirements of the senior institution to which they plan to transfer.

Placement in college level English, math, and science courses depends upon scores achieved in placement tests (ASSET, COMPASS, or ACT). Placement in developmental level courses may be required to ensure student success but will not count toward graduation.

**Note 2:** The College recommends that students take a sequence in literature and history. However, the state requirement is that at least one history and one literature must be completed with a sequence in one or the other. If only one literature is completed, the student must take an additional course from Area II to replace it. If only one history is completed, the student must take an additional course from Area IV to replace it. Only ART 100 or MUS 101 will generally meet the fine art requirement at transfer institutions.

**Note 3:** Students may take courses as many times as permissible, credit will not be cumulative.

**It is the student's responsibility to become familiar with the requirements of the senior institution to which transfer may occur.** A student planning to transfer should follow a prescribed transfer program in order to prevent loss of credit upon transferring. Students should consult with their advisor or the Advising Center before registering.
Core Degree Requirements for the Associate in Arts Degree or the Associate in Science Degree

The Associate Degree (A.A. or A.S.) is awarded to a student completing a planned university parallel program designed to meet the requirements of the first two years of a Bachelor of Arts Degree or a Bachelor of Science Degree. The requirements vary with individual four-year institutions; therefore, students should consult the catalog of the four-year college to which they plan to transfer, discuss plans with their advisor, and/or consult the Advising Center. All associate degrees contain the following core requirements:

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**Keyboarding skills are essential for the successful completion of English 101.**

| Area I: Written Composition | .................. | 6 **ENG 101 and 102** |
| Area II: Humanities and Fine Arts | .................. | 12 *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262, SPH 107, Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101 | 8 |
| Area III: Natural Sciences and Mathematics | ............... | 11 Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214, Math: Choose one course from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 | 3 |
| Area IV: History, Social and Behavioral Science | ............... | 12 *History: HIS 101 and 102 or HIS 201 and 202, Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 | 6 |
| Area V: Pre-Professional, Pre-Major, and Elective Courses | ............... | 19-22 CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective | 6-9 |

**Total Semester Transfer Hours** .......................... **61-64**

* See note 2 on page 41.

General Liberal Arts

Associate in Arts Degree

Transfer Guide

Available: Phil Campbell and Shoals Campuses

Advisors: M. McClung (6313) mclung@nwsc.edu
D. Benson (5296) dbenson@nwsc.edu
K. Tucker (8060) ktucker@nwsc.edu
J. Morris (5294) jmorris@nwsc.edu
T. Kelley (5486/8287) tkelley@nwsc.edu
T. Shackelford (6260) shackelford@nwsc.edu
L. Gibson (5393) lgibson@nwsc.edu
P. Sealy (5324) sealy@nwsc.edu
L. Wright (5309) lauren.wright@nwsc.edu

This guide has been developed for students seeking a liberal arts degree. Students should decide as early as possible at which four-year institution they will complete the last two years of work for the bachelor’s degree. Substitution of courses may be made according to the specific requirements of the institution to which the student plans to transfer. Changes must be recommended by an advisor and approved by the Vice President.

*Students may earn this degree through distance education.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

| Area I: Written Composition | .................. | 6 **ENG 101 and 102** |
| Area II: Humanities and Fine Arts | .................. | 12 *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262, SPH 107, Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101 | 3 |
| Area III: Natural Sciences and Mathematics | ............... | 11 Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214, Math: Choose one course from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 | 3 |
| Area IV: History, Social and Behavioral Science | ............... | 12 *History: HIS 101 and 102 or HIS 201 and 202, Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 | 6 |
| Area V: Pre-Professional, Pre-Major, and Elective Courses | ............... | 19-22 CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective | 6-9 |

**Total Semester Transfer Hours** .......................... **60-64**

* See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.**
**Art**

**Associate in Arts Degree**

**Transfer Guide**

Available: Phil Campbell and Shoals Campuses
Advisors: J. Frederick (6294/5494) jfrederick@nwscc.edu

This guide has been developed for those students planning to major or minor in art. Students planning to major or minor in art should consult the university to which they plan to transfer and plan their program of study in consultation with the Art Department.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>................................. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>* <strong>ENG 101 and 102</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>................................. 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262....6</td>
<td></td>
</tr>
<tr>
<td>SPH 107 ........................................... 3</td>
<td></td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101 ..................... 3</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>................................. 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214 .................. 8</td>
<td></td>
</tr>
<tr>
<td>Math: Choose one course from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 .................. 3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>................................. 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202 .................................. 6</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 .................. 6</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area V: Pre-Professional, Pre-Major, and Elective Courses</th>
<th>.................................. 19-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 113, 114, 121, 127, 299 ................................ 13</td>
<td></td>
</tr>
<tr>
<td>CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective .................................. 6-9</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Transfer Hours .................................. 61-64**

* See note 2 on page 41.

**Music**

**Associate in Arts Degree**

**Transfer Guide**

Available: Phil Campbell Campus
Advisors: J. McAlister (6299) jmcalister@nwscc.edu

This guide has been developed as a guideline for those students planning a major or minor in music. Students planning a major in music therapy, music theater, or commercial music should consult the university from which they will receive a degree and plan their program of study in consultation with the Music Department.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>................................. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 and 102</strong></td>
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<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>................................. 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262....6</td>
<td></td>
</tr>
<tr>
<td>SPH 107 ........................................... 3</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>................................. 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214 .................. 8</td>
<td></td>
</tr>
<tr>
<td>Math: Choose one course from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 .................. 3</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>................................. 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202 .................................. 6</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area V: Pre-Professional, Pre-Major, and Elective Courses</th>
<th>.................................. 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 111, 112, 113, 114, 211, 212 .................. 14</td>
<td></td>
</tr>
<tr>
<td>(If not taken in Area II) 4 hours of applied music .......... 4</td>
<td></td>
</tr>
<tr>
<td>4 hours of music ensemble ................................ 4</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Transfer Hours .................................. 64**

* See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101. Computer competency skills are embedded within one or more courses required in this curriculum.**

Northwest-Shoals Community College 2015-2016
**Pre-Law Associate in Arts Degree**

**Transfer Guide**

Available:  Phil Campbell and Shoals Campuses
Advisors:  K. Brackins (6242) kbrackins@nwscc.edu
K. Tucker (8060) ktucker@nwscc.edu

This guide is designed for students who plan to transfer to a four-year institution to complete requirements for admission to law school.

While students planning careers in law may pursue a wide variety of undergraduate programs of study, a broad liberal arts education is considered an ideal preparation for the study of law.

*Students may earn this degree through distance education.*

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition .................................</th>
<th>6</th>
<th><strong>ENG 101 and 102</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area II: Humanities and Fine Arts ........................</td>
<td>12</td>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262... 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPH 107 ..................................................</td>
<td>3</td>
<td>*Elective: Choose one course from among ART 100, MUS 101, PHL 106/206, REL 100/151/152, or SPA 101...... 3</td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics ..............</td>
<td>11</td>
<td>Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214 .......... 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math: Choose one from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238.............</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science ..........</td>
<td>12</td>
<td>*History: HIS 101 and 102 or HIS 201 and 202 ............... 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 ......</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Area V: Pre-Professional, Pre-Major, and Elective Courses ..................................................</td>
<td>19-23</td>
<td>ECO 231, 232; HED 226, PHL 206, POL 211, PSY 200, SOC 200 (If not already completed for Area IV) CIS 146 or demonstrated equivalent computer competency skills. PED can be used as a general elective.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Transfer Hours .......................................................... 60-64**

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.**

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**Teacher Education (Pre-Elementary Education) Associate in Arts Degree**

**Transfer Guide**

Available:  Phil Campbell and Shoals Campuses
Advisors:  T. Kelley (5486/6287) tkelley@nwscc.edu
S. Crabtree (6258) scrabtree@nwscc.edu
G. Long (5334) glong@nwscc.edu
A. Lyndon (5319) lyndon@nwscc.edu
M. McClung (6313) mcclung@nwscc.edu
K. Tucker (8060) ktucker@nwscc.edu
L. Gibson (5393) lgibson@nwscc.edu
L. Wright (5309) lauren.wright@nwscc.edu

This guide is designed for students who plan to transfer to a four-year institution to complete requirements for teaching in an elementary school. All students entering elementary education programs at senior institutions must satisfactorily complete a language competency examination. Many institutions require foreign language or computer science courses. Students should consult their advisor and the university to which they plan to transfer.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition: **ENG 101 and 102 .......... 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area II: Humanities and Fine Arts ........................</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>SPH 107 ..................................................</td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics ..............</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Math: Choose one course from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238.............</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science ..........</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 ......</td>
</tr>
<tr>
<td>Area V: ***Pre-Professional, Pre-Major, and Elective Courses: ..................................................</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>****Additional Maths (MTH 116 cannot be used) MTH 100 or above........................................ 6</td>
</tr>
<tr>
<td></td>
<td>CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective ...... 9</td>
</tr>
</tbody>
</table>

**Total Semester Transfer Hours .......................................................... 64**
Teacher Education

(Pre-Secondary Education)

Associate in Arts Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: G. Long (5334) glong@nwsc.edu
K. Brackins (6242) kbrackins@nwsc.edu
M. Lee (5491) mlee@nwsc.edu
S. Crabtree (6258) scrabtree@nwsc.edu
T. Kelley (5486/6287) tkelley@nwsc.edu
K. Tucker (8060) ktucker@nwsc.edu
L. Wright (5309) lauren.wright@nwsc.edu

This guide is designed for students who plan to transfer to a four-year institution to complete requirements for teaching in high school. Consideration should be given to major subject areas such as English, science, history, or mathematics. All students entering secondary education programs at senior institutions will be required to pass a language competency examination. Many institutions require foreign language courses. Students should consult their advisor and the university to which they plan to transfer.

* Students may earn a degree through distance education. Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Semester Hours

Area I: Written Composition: **ENG 101 and 102 ..........6

Area II: Humanities and Fine Arts ..................................12
  *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262.... 6
  SPH 107 ..................................................3
  Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, or SPA 101 ..................................................3

Area III: Natural Sciences and Mathematics .........................11
  Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202, 213, 214 ..................................................8
  Math: Choose one course from MTH 110 or 112 (or above), MTH 113, 120, 125, 126, 227, 237, 238 ........................................3
  (MTH 110 not acceptable for math and science teachers.)

Area IV: History, Social and Behavioral Science .....................12
  *History: HIS 101 and 102 or HIS 201 and 202 .........................6
  Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211; PSY 200, 210; SOC 200, 210** .........................6

Area V: Pre-Professional, Pre-Major, and Elective Courses: ..................19-23
  CIS 146 or demonstrated equivalent computer competency skills.
  Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective.

Total Semester Transfer Hours ........................................60-64

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.

***Most universities prefer PSY 200 and PSY 210.

UNA requires a Spanish course.
**Business Administration**

Associate in Science Degree

Transfer Guide

Available: Phil Campbell and Shoals Campuses

Advisors: 
T. McClinton (5212) mcclinton@nwsc.edu
J. James (6234/5346) jamesje@nwsc.edu
P. Hogan (5322) hogan@nwsc.edu
J. Baltes (5353) jbaltes@nwsc.edu
P. Peters (6326) ppeters@nwsc.edu

This guide is designed for the student to transfer to four-year institutions that offer degrees in various areas of business administration such as Accounting, Banking and Finance, Management, and Marketing. Students should consult their advisor and the university to which they plan to transfer.

*Students may earn this degree through distance education.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 and 102</strong></td>
<td></td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts</td>
<td>12</td>
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<td>SPH 107</td>
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<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101</td>
<td></td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics</td>
<td>11</td>
</tr>
<tr>
<td>Science: Choose two core courses from among BIO 103, 104, CHM 104, 105, 111,112 PHS 111, 112; PHY 201, 202, 213, 214 ... 8</td>
<td></td>
</tr>
<tr>
<td>Math: Choose one from MTH 112 or above**</td>
<td>3</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science</td>
<td>12</td>
</tr>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>ECO 231 and 232</td>
<td>6</td>
</tr>
<tr>
<td>Area V: Pre-Professional, Pre-Major, and Elective Courses</td>
<td>19-23</td>
</tr>
<tr>
<td>BUS 241 and 242</td>
<td>6</td>
</tr>
<tr>
<td>Business Electives: Choose three courses from among BUS 215, BUS 248, BUS 263, BUS 271, BUS 272, BUS 275, BUS 285, BUS 279</td>
<td>9</td>
</tr>
<tr>
<td>CIS 146</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>1-5</td>
</tr>
<tr>
<td>PED can be used as a general elective.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Transfer Hours** ........................................60-64

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.

***Some schools require calculi, MTH 125 or MTH 120.

**Child Development**

Pre-Human Environmental Science

Associate in Science Degree

Transfer Guide

Available: Phil Campbell and Shoals Campuses

Advisors: D. Durdujuni (5450) durdujn@nwsc.edu

This guide concentrates on the growth and development of young children (birth to 5). Students learn to apply developmental principles in the design, implementation, and evaluation of programs for young children. Students should consult their advisor and the university to which they plan to transfer.

* Students may earn a degree through distance education.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 and 102</strong></td>
<td></td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts</td>
<td>12</td>
</tr>
<tr>
<td>*Literature: Choose a sequence ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 6</td>
<td></td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
</tr>
<tr>
<td><em>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206</em>, REL 100/151/152, or SPA 101</td>
<td></td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics</td>
<td>11</td>
</tr>
<tr>
<td>Science: BIO 103 and 104 ... 8</td>
<td></td>
</tr>
<tr>
<td>Math: Choose from MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 ... 3</td>
<td></td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science</td>
<td>12</td>
</tr>
<tr>
<td>*History: Choose a sequence HIS 101 and 102 or HIS 201 and 202 ... 6</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences: PSY 200 and SOC 200 or PSY 210** ... 6</td>
<td></td>
</tr>
<tr>
<td>Area V: Pre-Professional, Pre-Major, and Elective Courses ........................................19-23</td>
<td></td>
</tr>
</tbody>
</table>

Through articulation agreements with the University of Alabama and the University of North Alabama, students who hold this degree will be allowed to transfer 21 to 24 hours of their CHD course work toward a B.S. degree in the area of Human Environmental Science.

The CHD courses generally accepted are included below:

* CIS 146 Microcomputer Applications
** CHD 201 Child Growth and Development
** CHD 203 Children’s Literature and Language Dev.
** CHD 204 Methods and Materials
CHD 206 Children’s Health and Safety
CHD 210 Educating Exceptional Young Children
CHD 209 Infant and Toddler Education Programs
CHD 205 Program Planning
* CHD 208 Administration of Child Development Programs
* CHD 202 Creative Experiences
* CHD 215 Supervised Practical Experience

**Total Semester Transfer Hours** ........................................60-64

* Specific to the University of North Alabama.
** Specific to the University of Alabama.

NOTE: This degree does not lead to teacher certification by the State Department of Education.
## Child Development 240102 PEC

**Teacher Education (Pre-Early Childhood) Associate in Science Degree Transfer Guide**

Available: Phil Campbell and Shoals Campuses  
Advisors: D. Durdunji (5450) durdunji@nwcs.edu

This guide is designed for the student to transfer to Athens State University for completion of an Early Childhood Major (P-3rd grade) for a Bachelor of Science Degree in Education. Students should consult their advisor and the university to which they plan to transfer.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area I:</strong>  Written Composition: <strong>ENG 101 and 102</strong> ...... 6</td>
</tr>
</tbody>
</table>
| **Area II:**  Humanities and Fine Arts ............................... 12  
  *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 .... 6  
  SPH 107 ......................................................... 3  
  *Elective: Choose one course from among ART 100, MUS 101, PHL 106/206, REL 100/151/152, or SPA 101 ............... 3 |
| **Area III:**  Natural Sciences and Mathematics .................... 14  
  Science: BIO 103 and 104 .............................................. 8  
  ***Math: Choose from MTH 100, MTH 110 and MTH 112 (or above)  
  MTH 113, 120, 125, 126, 227, 237, 238 .... 6 |
| **Area IV:**  History, Social and Behavioral Science ............. 12  
  *History: HIS 101 and 102 or HIS 201 and 202 ................. 6  
  Social and Behavioral Sciences:  
  PSY 200 and SOC 200 .............................................. 6 |
| **Area V:**  Pre-Professional, Pre-Major, and  
  Elective Courses.................................................... 17  
  CHD 206 and CHD 209 .............................................. 6  
  CIS 146 .................................................................. 3  
  PHS 111 .................................................................. 4  
  ***CHD Elective ...................................................... 3  
  Physical Education .................................................... 1 |
| **Total Semester Transfer Hours .................................... 62** |

*See note 2 on page 41.  
**Keyboarding skills are essential for the successful completion of English 101.  
***See advisor for suggested electives.  
****Additional maths may be required.

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## Computer Information Systems 240101 CI

**Associate in Science Degree Transfer Guide**

Available: Phil Campbell and Shoals Campuses  
Advisors: T. Roberson (5276) roberman@nwcs.edu  
J. James (6234/5346) jamesj@nwcs.edu  
S. Chandler (5234) schandler@nwcs.edu  
P. Peters (6326) ppeters@nwcs.edu

This guide is designed for students who plan to transfer to four-year institutions for a major in Computer Information Systems or Management Information Systems. It is designed to provide skills for an entry-level position as an applications developer while providing the general education program for further study toward a baccalaureate degree.

Each program requires individual adjustment to prepare for transfer and the student should be in contact with the transfer institution as the A.S. degree is pursued. Students are trained to use current PC software and hardware. Students should consult their advisor and the university to which they plan to transfer.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>
| **Area I:**  Written Composition ........................................ 6  
  **ENG 101 and 102** .................................................. 6 |
| **Area II:**  Humanities and Fine Arts ............................ 12  
  *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 .... 6  
  SPH 107 ......................................................... 3  
  *Elective: Choose one course from among ART 100, MUS 101, PHL 106/206, REL 100/151/152, or SPA 101 ............... 3 |
| **Area III:**  Natural Sciences and Mathematics .................. 14  
  Science: Choose two core courses from  
  BIO 103, 104, CHM 104, 105, 111, 112;  
  PHS 111, 112; PHY 201, 202, 213, 214 .... 8  
  Math: Choose one from MTH 112 or above ...................... 3  
  ***CIS 146 ...................................................... 3 |
| **Area IV:**  History, Social and Behavioral Science ........... 12  
  *History: HIS 101 and 102 or HIS 201 and 202 .................. 6  
  Choose two courses from among  
  ECO 231, ECO 232, POL 200, POL 211,  
  PSY 200, PSY 210, SOC 200 .................................... 6 |
| **Area V:**  Pre-Professional, Pre-Major, and  
  Elective Courses.................................................... 16-20  
  BUS 241 and 242 .............................................. 6  
  CIS 251 .................................................................. 3  
  CIS 255 .................................................................. 3  
  General Electives/CIS Electives ................................. 4-8  
  PED can be used as a general elective. |
| **Total Semester Transfer Hours ...................................... 60-64** |

*See note 2 on page 41.  
**Keyboarding skills are essential for the successful completion of English 101.  
****Students without prior computer knowledge or keyboarding should enroll in CIS 096.
Environmental Health
and Safety

Associate in Science Degree
Transfer Guide

Available: Shoals Campus
Advisors: C. Eubanks (5293) eubanks@nwscc.edu

*This guide is designed for students who plan to transfer to four-year institutions offering a degree in Public Safety Administration or Environmental Health and Safety. Also see the A.A.S. degree and short-term certificate programs. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

Semester Hours

Area I: Written Composition .....................................6
**ENG 101 and 102

Area II: Humanities and Fine Arts ........................... 12
*Literature: ENG 271 and 272,
ENG 251 and 252 or ENG 261 and 262...6
SPH 107 .........................................................3
*Elective: Choose one course from among
ART 100, MUS 101, PHL 106/206, REL
100/151/152, or SPA 101 ..................3

Area III: Natural Sciences and Mathematics .............. 11
Science: CHM 104 and PHS 120 ............8
Math: Choose one from MTH 110,
MTH 112 or above ....................3

Area IV: History, Social and Behavioral Science ...... 12
***History: HIS 101 and 102
or HIS 201 and 202 ......................6
Social and Behavioral Sciences:
Choose two courses from among
ECO 231, ECO 232, GEO 100,
POL 211, PSY 200, PSY 210,
SOC 200, SOC 210 ..................6

Area V: Pre-Professional, Pre-Major, and
Elective Courses .....................................22-23
EVT 105, EVT 107, EVT 110,
EVT 220, EVT 250, EVT 260 ............19
Choose one course from among
EVT 201, EVT 210, EVT 280 ...........3-4

Total Semester Transfer Hours ..........................63-64

*This program specifically links to the Public Safety Administration program at Athens State University. Students transferring to other institutions should consult with the senior institution to which they plan to transfer concerning transferability of PHS 120 and the EVT courses.

**Keyboarding skills are essential for the successful completion of English 101.

***See note 2 on page 41.

General Education

Associate in Science Degree
Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319) lyndon@nwscc.edu
D. Benson (5296) dbenson@nwscc.edu
T. Kelley (5486/6287) tkelley@nwscc.edu
M. Lee (5491) mlee@nwscc.edu
M. McClung (6313) mcclung@nwscc.edu
J. Morris (5294) jmorris@nwscc.edu
L. Gibson (5393) lgibson@nwscc.edu
L. Wright (5309) lauren.wright@nwscc.edu

This guide is designed for students seeking a general education core for transfer to four-year institutions. It allows flexibility in the selection of general electives or courses preparatory for a major. Students should consult the catalog of the college to which they intend to transfer and consult their advisor.

Students may earn this degree through distance education.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

Semester Hours

Area I: Written Composition .....................................6
**ENG 101 and 102

Area II: Humanities and Fine Arts ........................... 12
*Literature: ENG 271 and 272,
ENG 251 and 252 or ENG 261 and 262...6
SPH 107 .........................................................3
Elective: Choose one course from among
ART 100, MUS 101, PHL 106/206*,
REL 100/151/152, or SPA 101 ............3

Area III: Natural Sciences and Mathematics .............. 11
Science: Choose two core courses from among
BIO 103, 104; CHM 104, 105, 111, 112;
PHS 111, 112; PHY 201, 202, 213,214 ....8
Math: Choose one course from MTH 110,
or MTH 112 (or above) MTH 113, 120,
125, 126, 227, 237, 238 .............3

Area IV: History, Social and Behavioral Science ...... 12
*History: HIS 101 and 102
or HIS 201 and 202 ......................6
Social and Behavioral Sciences:
Choose two courses from among
ECO 231, 232; GEO 100; POL 211,
PSY 200, 210; SOC 200, 210 ............6

Area V: Pre-Professional, Pre-Major, and
Elective Courses .....................................19-23
CIS 146 or demonstrated equivalent
computer competency skills. Elective
courses appropriate to individual
student and transfer institution.
P.E.D can be used as a general elective.

Total Semester Transfer Hours ..........................60-64

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.
**Fire Science/Fire Service Management**

**Associate in Science Degree Transfer Guide**

Available: Shoals Campus

Advisors:

*This guide is designed for students who plan to transfer to four-year institutions offering a degree in fire science or public safety administration. Also see the short-term certificate program. Students should consult their advisor and the university to which they plan to transfer.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition</th>
<th><strong>ENG 101 and 102</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Area II: Humanities and Fine Arts</strong></td>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Area III: Natural Sciences and Mathematics</strong></td>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Area IV: History, Social and Behavioral Science</strong></td>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Area V: Pre-Professional, Pre-Major, and Elective Courses</strong></td>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Transfer Hours</strong></td>
<td><strong>ENG 101 and 102</strong></td>
</tr>
</tbody>
</table>

**Fire Science/Fire Services Management Short-Term Certificate**

Available: Shoals Campus

Advisors:

This short-term certificate is designed to prepare students for employment in fire science or related business fields. Also, see the A.S. Degree Program.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>FSC 101 Introduction to Fire Science</th>
<th><strong>Theory Lab Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FSC 208 Fire Combat Tactics and Strategy</td>
<td><strong>Theory Lab Hours</strong></td>
</tr>
<tr>
<td></td>
<td>FSC 110 Building Construction Principles</td>
<td><strong>Theory Lab Hours</strong></td>
</tr>
<tr>
<td></td>
<td>FSC 241 Fire Investigation I</td>
<td><strong>Theory Lab Hours</strong></td>
</tr>
<tr>
<td></td>
<td>FSC 291 Fire Service Officer I</td>
<td><strong>Theory Lab Hours</strong></td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours**

*This program specifically links to the Public Safety Administration program at Athens State University. Students transferring to other institutions should consult with the senior institution to which they plan to transfer concerning transferability of the FSC courses.

**Keyboarding skills are essential for the successful completion of English 101.

***See note 2 on page 41.*
Medical Technology  240102  MT
Associate in Science Degree  240102  CLT
Transfer Guide  

This guide is designed for students who plan to transfer to UAB, Auburn or other institutions offering a four-year medical technology degree. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**Keyboarding skills are essential for the successful completion of English 101.**

Pre-Chemical Laboratory Technician  
Associate in Science Degree  
Transfer Guide  

This guide is designed for students who plan to transfer to four-year institutions offering a degree in Chemical Technology. Also see the short-term certificate program. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**Keyboarding skills are essential for the successful completion of English 101.**
Chemical Laboratory Technician Short-Term Certificate

Available: Phil Campbell and Shoals Campuses
Advisors: C. Sockwell (5378) sockwell@nwssc.edu
M. Murphy (6246) docm@nwssc.edu

The Chemical Laboratory Technician short-term certificate emphasizes chemistry and mathematics. The holder of this certificate will have completed 8 semester hours of chemistry and will be exposed to many different areas of chemistry. These areas include fundamental concepts of chemistry, chemical equations and reaction, stoichiometry, thermodynamics, atomic structure, general concepts of chemical bonding, Valence Bond Theory, Molecular Orbital Theory, chemistry of gases and kinetic theory, acids and bases, chemical equilibrium, and chemical thermodynamics. The material covered in the courses, along with skills developed in the laboratory, prepares the student for a wide range of employment possibilities, from industrial laboratories to environmental testing.

For those students who wish to continue their education, these courses are transferable.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 103 Principles of Biology I</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CHM 111 College Chemistry I</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CHM 112 College Chemistry II</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>ENG 101 English Composition I</strong></td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 130 Technical Report Writing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 112 Precalculus Algebra</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 265 Elementary Statistics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ...........................................25

**Keyboarding skills are essential for the successful completion of English 101.**

Pre-Computer Science Associate in Science Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: T. Roberson (5276) roberson@nwssc.edu
J. James (6234/5346) jamesje@nwssc.edu
S. Chandler (5234) schandler@nwssc.edu
P. Peters (6326) ppeters@nwssc.edu

This guide is designed to prepare students for transfer to a four-year institution for a major in Computer Science, Computer Engineering, or Software Engineering, usually offered in a school of engineering or mathematics. Each program requires individual adjustment to prepare for transfer and the student should be in contact with the transfer institution, as the A.S. degree is pursued. Students are trained to use current PC software and hardware.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

| Area I | Written Composition ...........................................6
|        | ****ENG 101 and 102 |
| Area II | Humanities and Fine Arts .................................12
|        | ****Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262... 6
|        | SPH 107 ...............................3
|        | Elective: Choose one course from among ART 100, MUS 101, PHL 108/206*, REL 100/151/152, or SPA 101...........3 |
| Area III | Natural Sciences and Mathematics .....................25 |
|         | Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202, 213, 214......8
|         | MTH 112**...........................................3
|         | MTH 113.............................3
|         | MTH 125........................................4
|         | MTH 126........................................4
|         | ****CIS 146....................................3
| Area IV | History, Social and Behavioral Science ............12
|         | ****History: HIS 101 and 102 or HIS 201 and 202 ..........................6
|         | Choose two courses from among ECO 231, ECO 232, POL 200, POL 211, PSY 200, PSY 210, SOC 200..................6
| Area V | Pre-Professional, Pre-Major, and Elective Courses ........................................9
|         | CIS 251 and CIS 255............................6
|         | General Electives..........................3
|         | PED can be used as a general elective.

Total Semester Transfer Hours ....................................64

*Although these courses will transfer, they may not satisfy the Fine Arts requirement of universities.

**Students with high placement scores may skip the lower math courses.

*** See note 2 on page 41.

****Keyboarding skills are essential for the successful completion of English 101.

*****Students without prior computer knowledge or keyboading should enroll in CIS 096.

Northwest-Shoals Community College 2015-2016
Pre-Criminal Justice  
Associate in Science Degree  
Transfer Guide

**Keyboarding skills are essential for the successful completion of English 101.**

Pre-Dentistry  
Associate in Science Degree  
Transfer Guide

**Keyboarding skills are essential for the successful completion of English 101.**
Pre-Engineering 240102 ENG
Associate in Science Degree Transfer Guide
Available: Phil Campbell and Shoals Campuses
Advisors: T. Howard (5259) howard@nwscc.edu
C. Eubanks (5293) eubanks@nwscc.edu

This guide is designed for students who plan to transfer to four-year institutions to complete requirements for a degree in Engineering. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>12</td>
</tr>
<tr>
<td>Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262</td>
<td>6</td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences and Mathematics</td>
<td>12</td>
</tr>
<tr>
<td>Science: PHY 213 and 214</td>
<td>8</td>
</tr>
<tr>
<td>Math: MTH 113, 120, 125, 126, 227, 237, 238</td>
<td>4</td>
</tr>
<tr>
<td>History, Social and Behavioral Science</td>
<td>12</td>
</tr>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210</td>
<td>6</td>
</tr>
<tr>
<td>(ECO 232 is the preferred elective in Area IV)</td>
<td></td>
</tr>
<tr>
<td>Pre-Professional, Pre-Major, and Elective Courses</td>
<td>18-22</td>
</tr>
<tr>
<td>Choose from CIS 231 or CIS 251, CHM 111, CHM 112, CHM 211, CHM 222 (for CHE), EGR electives, MTH 125, 126, 227, 237, 238</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Transfer Hours 60-64

*See note 2 on page 41.

**University requirements may vary. See your advisor for substitution.

***Keyboarding skills are essential for the successful completion of English 101.

Pre-Environmental Biology 240102 EB
Associate in Science Degree Transfer Guide
Available: Phil Campbell and Shoals Campuses
Advisors: M. Murphy (6246) docm@nwscc.edu

This guide is designed for students who plan to transfer a four-year institution to complete requirements for a degree. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition</td>
<td>6</td>
</tr>
<tr>
<td>**ENG 101 and 102</td>
<td></td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts</td>
<td>12</td>
</tr>
<tr>
<td>Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262</td>
<td>6</td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences and Mathematics</td>
<td>11</td>
</tr>
<tr>
<td>Science: BIO 103 and 104</td>
<td>8</td>
</tr>
<tr>
<td>Math: MTH 112 (higher is preferred)</td>
<td>3</td>
</tr>
<tr>
<td>MTH 113, 120, 125, 126, 227, 237, 238</td>
<td>3</td>
</tr>
<tr>
<td>History, Social and Behavioral Science</td>
<td>12</td>
</tr>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210</td>
<td>6</td>
</tr>
<tr>
<td>(ECO 232 is the preferred elective in Area IV)</td>
<td></td>
</tr>
<tr>
<td>Pre-Professional, Pre-Major, and Elective Courses</td>
<td>19-23</td>
</tr>
<tr>
<td>Choose from CIS 231 or CIS 251, CHM 111, CHM 112, CHM 211, CHM 222 (for CHE), EGR electives, MTH 125, 126, 227, 237, 238</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Transfer Hours 60-64

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.
Pre-Environmental Science  
Associate in Science Degree Transfer Guide

Available:  Phil Campbell and Shoals Campuses
Advisors:  C. Eubanks (5293) eubanks@nwscc.edu
          C. Sockwell (5378) sockwell@nwscc.edu
          M. Murphy (6246) docm@nwscc.edu

This guide is designed for students who plan to transfer to four-year institutions offering a degree in Environmental Science. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Semester Hours

Area I:  Written Composition ............................................ 6
        **ENG 101 and 102

Area II: Humanities and Fine Arts ......................... 12
        *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 .... 6
        SPH 107 .................................................. 3
        Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*,
        REL 100/151/152, or SPA 101 ....................... 3

Area III: Natural Sciences and Mathematics .......... 11
        Science: Choose two core courses from among BIO 103, 104; CHM 111, 112;
        PHY 201, 202, 213, 214 .... 8
        Math: MTH 112 (higher is preferred)
        MTH 113, 120, 125, 126, 227, 237, 238 .... 3

Area IV: History, Social and Behavioral Science .... 12
        *History: HIS 101 and 102 or
        HIS 201 and 202.................................... 6
        Social and Behavioral Sciences: Choose two courses from among BIO 231, ECO 232, GEO 100,
        POL 211, PSY 200, PSY 210,
        SOC 200, SOC 210......................... 6

Area V: Pre-Professional, Pre-Major, and
        Elective Courses........................................... 19-23
        CIS 146 or demonstrated equivalent computer competency skills.
        Choose from BIO 103, BIO 104, BIO 220,
        CHM 111, CHM 112, MTH 125, MTH 126,
        MTH 265
        Elective courses appropriate to individual student and transfer institutions

Total Semester Transfer Hours .........................60-64

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.

Pre-Financial Planning and Counseling  
Associate in Science Degree Transfer Guide

Available:  Phil Campbell and Shoals Campuses
Advisors:  E. Carter (5277) cartere@nwscc.edu
          J. Baltes (5353) jbaltes@nwscc.edu
          J. James (6234/5346) jamesjo@nwscc.edu

This guide is designed for students who plan to transfer to a four-year institution and major in a program such as Pre-Financial Planning and Counseling. The coursework is focused on developing students with a broad theoretical background in the social sciences. Students will also learn to apply that knowledge toward the solution of practical problems of individual and family economic well being. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Semester Hours

Area I:  Written Composition ............................................ 6
        **ENG 101 and 102

Area II: Humanities and Fine Arts ......................... 12
        **Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 .... 6
        SPH 107 .................................................. 3
        Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*,
        REL 100/151/152, or SPA 101 ....................... 3

Area III: Natural Sciences and Mathematics .......... 11
        Science: Choose two core courses from among BIO 103, 104; PHS 111, 112;
        PHY 201, 202, 213, 214; CHM 111, 112...... 8
        Math: MTH 120 or above............................. 3

Area IV: History, Social and Behavioral Science .... 12
        **History: HIS 101 and 102
        or HIS 201 and 202.................................... 6
        Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100,
        POL 211, PSY 200, PSY 210,
        SOC 200, SOC 210......................... 6

Area V: Pre-Professional, Pre-Major, and
        Elective Courses........................................... 19-23
        BUS 241, BUS 271, BUS 272 ................. 9
        CIS 146.................................................. 3
        General Elective...................................... 7-11

Total Semester Transfer Hours .........................60-64

*See note 2 on page 41.

**Must choose a 6 semester hour sequence in either Literature or History.

***Keyboarding skills are essential for the successful completion of English 101.
Pre-Health, Physical Education and Recreation  
Associate in Science Degree  
Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisor: M. Lee (5491) mlee@nwsc.edu
T. Shackelford (6260) shackelford@nwsc.edu

This guide is designed for students who plan to transfer to four-year institutions and major in various areas of health, physical education and recreation. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

| Semester Hours | Area I: Written Composition ............................................. 6
|----------------|------------------------------------------------------------------
|----------------|------------------------------------------------------------------
| Area II:        | Humanities and Fine Arts .............................................. 12
|                | *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ..... 6
|                | SPH 107 ................................................................. 3
|                | Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA101......................... 3
| Area III:       | Natural Sciences and Mathematics .................................... 11
|                | Science: Choose two core courses from among BIO 103, 104; CHM 104, 105; CHM 111, 112; PHS 111, 112; PHY 201, 202, 213, 214 ......... 8
|                | Math: Choose one from MTH 110***, 112, 113, 120, 125, 126, 227, 237, 238 .......... 3
| Area IV:        | History, Social and Behavioral Science ............................ 12
|                | *History: HIS 101 and 102 or HIS 201 and 202 ...................... 6
|                | Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210 .......................... 6
| Area V:         | Pre-Professional, Pre-Major, and Elective Courses .................. 20-23
|                | CIS 146 ........................................................................... 3
|                | PED or HED electives ...................................................... 11-14
|                | General Electives ......................................................... 6-9
|                | PED can be used as a general elective.

Total Semester Transfer Hours ............................................................. 61-64

*See note 2 on page 41.

**Some four-year institutions will not accept MTH 110 in Area III.

***Keyboarding skills are essential for the successful completion of English 101.

Pre-Industrial Hygiene  
Associate in Science Degree  
Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisor: C. Sockwell (5378) sockwell@nwsc.edu
Mike Murphy (6246) docm@nwsc.edu

This guide is designed for students who plan to transfer to UNA to complete requirements for a degree. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

| Semester Hours | Area I: Written Composition ............................................. 6
|----------------|------------------------------------------------------------------
|----------------|------------------------------------------------------------------
| Area II:        | Humanities and Fine Arts .............................................. 12
|                | *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ..... 6
|                | SPH 107 ................................................................. 3
|                | Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, SPA 101 ......................... 3
| Area III:       | Natural Sciences and Mathematics .................................... 11
|                | Science: Choose two core courses from among BIO 103; CHM 111, 112 .......... 8
|                | Math: MTH 112 (higher is preferred) MTH 113, 125, 126 ................................. 3
| Area IV:        | History, Social and Behavioral Science ............................ 12
|                | *History: HIS 101 and 102 or HIS 201 and 202 ...................... 6
|                | Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210 .......................... 6
| Area V:         | Pre-Professional, Pre-Major, and Elective Courses .................. 19-23
|                | CIS 146 ........................................................................... 3
|                | Choose two from CHM 221, CHM 222, BIO 220 ................................. 8
|                | Choose two from MTH 125, MTH 126, MTH 265 ................................ 7-8
|                | General Electives ......................................................... 1-4
|                | PED can be used as a general elective.

Total Semester Transfer Hours ............................................................. 60-64

*See note 2 on page 41.

***Keyboarding skills are essential for the successful completion of English 101.
## Pre-Medicine

### Associate in Science Degree

#### Transfer Guide

A. Campbell and Shoals Campuses  
Advisor: M. Murphy (6246)  
C. Sockwell (5378)  

This guide is designed for students who plan to transfer to an institution with various types of professional programs to complete requirements for a degree. All pre-medical curricula have the same basic requirements. Students should consult their advisor and the university to which they plan to transfer.

### Entering students are required to complete ORI 107.

Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition</th>
<th>240102 MED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engl 101 and 102</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area II: Humanities and Fine Arts</th>
<th>240102 MED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engl 101 and 102</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area III: Natural Sciences and Mathematics</th>
<th>240102 MED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science: Choose two core courses from BIO 103, 104, CHM 111, 112; PHY 201, 202, 213, 214</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Math: Choose one from MTH 112 (higher is preferred) MTH 113, 120, 125, 126, 227, 237, 238</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area IV: History, Social and Behavioral Science</th>
<th>240102 MED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area V: Pre-Professional, Pre-Major, and Elective Courses</th>
<th>240102 MED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CIS 146 or demonstrated equivalent computer competency skills. Choose from BIO 103, BIO 104, BIO 220, CHM 111, CHM 112, CHM 221, CHM 222, PHY 201, PHY 202, PHY 213, PHY 214, MTH 125, MTH 265</td>
<td>19-23</td>
</tr>
</tbody>
</table>

### Total Semester Transfer Hours

- **60-64**

- **See note 2 on page 41.**

- **Keyboarding skills are essential for the successful completion of English 101.**
Pre-Optometry

Associate in Science Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisor: M. Murphy (6246) docm@nwscc.edu
C. Sockwell (5378) sockwell@nwscc.edu

This guide is designed for students who plan to transfer to an institution with various types of professional programs to complete requirements for a degree. All these curricula have the same basic requirements. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition ........................................ 6</td>
</tr>
<tr>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts .............................. 12</td>
</tr>
<tr>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ........ 6</td>
</tr>
<tr>
<td>SPH 107 ......................................................... 3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101* ............ 3</td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics .................. 11</td>
</tr>
<tr>
<td>Science: Choose two core courses from among BIO 103, 104; CHM 111, 112; PHY 201, 202, 213, 214 .............. 8</td>
</tr>
<tr>
<td>Math: Choose one from MTH 112 (higher is preferred) MTH 113, 120, 125, 126, 227, 237, 238 .................. 3</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science .......... 12</td>
</tr>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202 ................. 6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210 .................. 6</td>
</tr>
<tr>
<td>Area V: Pre-Professional, Pre-Major, and Elective Courses .................. 19-23</td>
</tr>
<tr>
<td>CIS 146 or demonstrated equivalent computer competency skills. Choose from BIO 103, BIO 104, BIO 220, CHM 111, CHM 112, CHM 221, CHM 222, PHY 201, PHY 202, PHY 213, PHY 214, MTH 125, MTH 265</td>
</tr>
<tr>
<td>Total Semester Transfer Hours .................................. 60-64</td>
</tr>
</tbody>
</table>

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.

Pre-Pharmacy

Associate in Science Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: C. Sockwell (5378) sockwell@nwscc.edu

This guide is designed for students who plan to transfer to an institution offering a degree in pharmacy. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition ........................................ 6</td>
</tr>
<tr>
<td><strong>ENG 101 and 102</strong></td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts .............................. 12</td>
</tr>
<tr>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ........ 6</td>
</tr>
<tr>
<td>SPH 107 ......................................................... 3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHL 106/206*, REL 100/151/152, or SPA 101* ............ 3</td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics .................. 11</td>
</tr>
<tr>
<td>Science: Choose two core courses from among BIO 103, 104; CHM 111, 112; PHY 201, 202, 213, 214 .............. 8</td>
</tr>
<tr>
<td>Math: MTH 112 (higher is preferred) MTH 113, 120, 125, 126, 227, 237, 238 ............ 3</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science .......... 12</td>
</tr>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202 ................. 6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210 .................. 6</td>
</tr>
<tr>
<td>Area V: Pre-Professional, Pre-Major, and Elective Courses .................. 19-23</td>
</tr>
<tr>
<td>Choose from BIO 103, BIO 104, BIO 201, BIO 202, BIO 220, CIS 130, CHM 111, CHM 112, CHM 221, CHM 222, PHY 201, PHY 202, PHY 213, PHY 214, MTH 113, MTH 125, MTH 265</td>
</tr>
<tr>
<td>Total Semester Transfer Hours .................................. 60-64</td>
</tr>
</tbody>
</table>

*See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.
Pre-Physical Therapy 240102 PPT  

Associate in Science Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: C. Sockwell (5378) sockwell@nwscc.edu

This guide is designed for students who plan to transfer to a four-year institution to complete requirements for an M.S. in Physical Therapy. To verify course transferability, students should consult an advisor and program to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 and 102</strong></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262</td>
<td>6</td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, THR 120</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science: Choose two courses from among BIO 103, BIO 104, CHM 111, CHM 112, PHY 201, PHY 202, PHY 213, PHY 214</td>
<td>8</td>
</tr>
<tr>
<td>Math: MTH 112 (higher is preferred)</td>
<td>3</td>
</tr>
<tr>
<td>MTH 113, MTH 120, MTH 125, MTH 126</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area V: Pre-Professional, Pre-Major, and Elective Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 146 or demonstrated equivalent computer competency skills</td>
<td>19-23</td>
</tr>
<tr>
<td>Choose from BIO 103, 104, 201, 202; CHM 111, 112; PHY 201, 202, 213, 214; MTH 113, 125, 265</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Semester Transfer Hours ........................................... 60-64

**See note 2 on page 41.

**Keyboarding skills are essential for the successful completion of English 101.

Pre-Veterinary Medicine 240102 VET  

Associate in Science Degree Transfer Guide

Available: Phil Campbell and Shoals Campuses
Advisors: C. Sockwell (5378) sockwell@nwscc.edu M. Murphy (6246) docm@nwscc.edu

This guide is designed for students who plan to transfer to an institution offering a degree in veterinary medicine. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 and 102</strong></td>
<td>6</td>
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</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262</td>
<td>6</td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Choose one course from among ART 100, MUS 101, PHY 106/206*, REL 100/151/152, or SPA101*</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Science: BIO 103, 104</td>
<td>8</td>
</tr>
<tr>
<td>Math: Choose from MTH 113, 120, 125, 126, 227, 237, 238</td>
<td>3</td>
</tr>
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<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*History: HIS 101 and 102 or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area V: Pre-Professional, Pre-Major, and Elective Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from CHM 111, CHM 112, CHM 221, CHM 222, PHL 206, PHY 201 or PHY 213, CIS 146</td>
<td>19-23</td>
</tr>
</tbody>
</table>

Total Semester Transfer Hours ........................................... 60-64

*See note 2 on page 41.

***Mississippi State science requirements may differ.

****Keyboarding skills are essential for the successful completion of English 101.
Water and Wastewater Management and Technology Associate in Science Degree Transfer Guide

Available: Shoals Campus
Advisor: M. Murphy (6246) docm@nwscc.edu

*This guide is designed for students who plan to transfer to four-year institutions offering a degree in water and wastewater management and technology. Also see the short-term certificate program. Students should consult their advisor and the university to which they plan to transfer.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Composition</td>
<td>6</td>
</tr>
<tr>
<td><strong>ENG 101 and 102</strong></td>
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<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities and Fine Arts</td>
<td>12</td>
</tr>
<tr>
<td><strong>Literature:</strong> ENG 271 and 272</td>
<td>6</td>
</tr>
<tr>
<td>SPH 107</td>
<td>3</td>
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<tr>
<td>Elective: Choose one course from</td>
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<tr>
<td>among ART 100, MUS 101, PHL 106,</td>
<td></td>
</tr>
<tr>
<td>PHL 206**, THR 120, Foreign Language</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science: Choose two core courses from CHM 104,</td>
<td></td>
</tr>
<tr>
<td>105, 111, and 112</td>
<td></td>
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<tr>
<td>(Chemistry Sequence Preferred)</td>
<td></td>
</tr>
<tr>
<td>BIO 103, 104, PHY 201, 202, 213, 214</td>
<td></td>
</tr>
<tr>
<td>PHS 111, 112, 120*</td>
<td>8</td>
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<tr>
<td>Math: Choose one from MTH 112</td>
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<tr>
<td>or above</td>
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<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History: HIS 101 and 102</td>
<td></td>
</tr>
<tr>
<td>or HIS 201 and 202</td>
<td>6</td>
</tr>
<tr>
<td>Social and Behavioral Sciences:</td>
<td></td>
</tr>
<tr>
<td>Choose two courses from ECO 231, GEO 100, POL 200,</td>
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</tr>
<tr>
<td>PSY 200, SOC 200</td>
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<table>
<thead>
<tr>
<th>Area V: Pre-Professional, Pre-Major Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 290, WMT 291 or CIS Elective</td>
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</tr>
<tr>
<td>WMT 100, WMT 101, WMT 102</td>
<td></td>
</tr>
<tr>
<td>WMT 120, WMT 213, WMT 214</td>
<td>18</td>
</tr>
</tbody>
</table>

Total Semester Transfer Hours 63

*This program specifically links to the Public Safety Administration program at Athens State University. Students transferring to other institutions should consult with the senior institution concerning transferability of PHS 120 and the WMT classes.

**Keyboarding skills are essential for the successful completion of English 101.

***See note 2 on page 41.
Career, Technical and Occupational Programs

Plans leading to the Associate in Applied Science and the Associate in Occupational Technology degrees are college-level programs of study designed to prepare students to enter occupational, semi-professional, or para-professional employment. Though many of the courses in these programs transfer to four-year colleges and universities, the primary intent is to prepare students for immediate employment after successful completion of a two-year program of courses.

Certificates are awarded to students who successfully complete the requirements of specific technical or occupational programs. These programs are offered to students who want to prepare for specific occupational employment. These programs vary in length from two to five semesters, and some do not require a high school diploma for admission. Entry into a career, technical, or occupational program is dependent upon the student’s ability to perform the essential functions of the program.

The College offers several short certification programs on an “as needed” basis. We refer to these short certification programs as General Certificate Programs. Many of these programs meet the minimum requirements for taking state board or other qualifying examinations.

Associate in Applied Science Degree

Child Development ................................................. 190708 CHD
Computer Information Systems Technology
   Personal Computer Systems Option ............. 110101 PCS
   Programming Option ..................................... 110101 PO
Criminal Justice ............................................. 430107 CRJ
Design Engineering Technology .................. 151301 D&D
Electronics Technology ................................. 470105 ILY
Emergency Medical Services ......................... 510904 EMP
Environmental Health and Safety Technician .... 150507 EVT
Industrial Systems Technology
   Air Conditioning and Refrigeration Option 470303 IAR
   Electrical Option ........................................ 470303 IEO
   Injection Molding Technology Option ......... 470603 IML
   Mechanical Option ..................................... 470303 IMO
Medical Assisting Technology ...................... 510801 MAT
Office Administration
   Accounting Option ........................................ 520401 OAO
   Administrative Professional Option .......... 520401 OAP
   Clerical Option .......................................... 520401 OCO
   Registered Nursing ..................................... 513801 NUR
Salon and Spa Management
   Esthetics Option .......................................... 120412 SEO
   Cosmetology Option .................................... 120412 SCO

Associate in Occupational Technology Degree

Accounting Technology ................................. 309999 ACR/AOD
Air Conditioning/Refrigeration Technology .... 309999 AET/AYT
Automotive Collision Repair ....................... 309999 ABR/ABA
Automotive Service Technology ................... 309999 AUR/AMT
Carpentry/Cabinetmaking ............................... 309999 CBU/CCW
Electrical Technology ................................. 309999 EAC
Machine Shop Technology ............................... 309999 MWT
Welding ....................................................... 309999 WCR/WMS/AUV/WAC

Career Certificates

Accounting Technology ................................. 520302 ACT
A/C/Refrigeration Technology ...................... 150501 ACR
Automotive Collision Repair ....................... 470603 ABR
Automotive Service Technology ................... 470604 AST
Carpentry/Cabinetmaking ................................ 460201 CAR
Electrical Technology .................................... 460302 ELT
Industrial Systems Technology - Mechanical ... 470303 IMT
Machine Tool/Computer ................................. 480508 WEL
Numerical Control (CNC) .............................. 480503 MSP
Office Administration .................................... 520401 OMD
Paramedic ..................................................... 510904 EMS
Practical Nursing (LPN) .................................. 511613 LPN
Salon and Spa Management - Esthetics Option .... 120412 SSE
Cosmetology Option ...................................... 120412 SSC
Welding ....................................................... 480508 WEL

Short-Term General Certificates

Basic Automotive Service Technology .......... 470604 AUM
Advanced Automotive Service Technology .... 470604 AAS
Air Conditioning/Refrigeration Technology Basic .... 150501 ARB
Air Conditioning/Refrigeration Technology Level 1 .. 150501 ACR1
Air Conditioning/Refrigeration Technology Level 2 .. 150501 ACR2
Air Conditioning/Refrigeration Technology Level 3 .. 150501 ACRC3
Basic Automotive Collision Repair ............... 470603 AUC
Biomedical Equipment Technology ............... 150401 BET
Basic Cabinetmaking .................................... 480703 CAB
Basic Carpentry .......................................... 460201 BC
Chemical Laboratory Technician ................... 410301 CHM
Child Development ....................................... 190708 CHD
Computer Aided Design Engineering Technology .... 151301 DDT
Computer Technology
   PC Hardware Technician ............................. 110101 PCH
   PC Software Technician ............................. 110101 PST
   EMT ...................................................... 510904 EMT
   Advanced EMT ........................................ 510904 EMA
   Energy Management Technology ................ 150503 ECT
   Environmental, Health & Safety Technician .... 150507 EHS
   Fire Science/Fire Services Management ........ 430202 FSC
   Industrial Systems Technology ..................... 470303 INS
   Injection Molding Technology ...................... 470303 IMT
   Medical Assisting Technology ..................... 510801 PBY
   Phlebotomy Option ..................................... 510801 BYP
   Medical Billing and Coding Option ............. 510801 MCO
   Water & Wastewater Management ............... 150506 WAM
   Basic Welding Technology ......................... 480508 WDT
   Basic SMAW (Stick) ................................ 480508 WBS
   FCAW/GMAW (MIG/Flux Cored) ............... 480508 WGF
   GTA Plate and Pipe (TIG) ...................... 480508 WPP
   SMAW Groove and Pipe (Stick) .......... 480508 WGP

Northwest-Shoals Community College 2015-2016
Allied Health - Linkage Programs
Clinical Laboratory Technician.................. 510899 GEL
Dental Assisting ...................................... 510899 GEL
Dental Hygiene ........................................ 510899 GEL
Diagnostic Imaging .................................... 510899 GEL
Diagnostic Medical Sonography .................. 510899 GEL
Health Information Technology .................... 510899 GEL
Human Services ....................................... 510899 GEL
Occupational Therapist Assistant ................ 510899 GEL
Physical Therapist Assistant ........................ 510899 GEL
Respiratory Therapy .................................. 510899 GEL

Allied Health Linkage Programs are to be completed at Wallace/Hanceville in order to receive degree.

Special Program
Nursing Assistant ..................................... 511614 NAS

Associate in Applied Science Degrees

These degrees are designed for students who want to prepare for a specific career or occupational employment and who do not plan to transfer to four-year institutions. While most of the coursework is transferable, the degrees lack the extent of a general education which facilitates transfer.

General Education Core for Associate in Applied Science Degree

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition ........................ 3-6</td>
</tr>
<tr>
<td>*A minimum of 3 hours is required from Area I.</td>
</tr>
<tr>
<td>A minimum of 3 hours is required from Area II, but 9 hours are required from both Areas I and II.</td>
</tr>
<tr>
<td>Area III: Natural Sciences and Mathematics .......... 9-11</td>
</tr>
<tr>
<td>Three hours must be in Mathematics and 6 hours may be distributed in Mathematics, Science, Computer Science, Environmental Technology 101 (PHS 120)</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Science ...... 3-6</td>
</tr>
<tr>
<td>Area V: Technical Concentration and Electives ....... 39-55</td>
</tr>
<tr>
<td>CIS 146 or demonstrated equivalent computer competency skills. A student evaluated with such skills must successfully complete an additional three-hour elective from any Area in lieu of CIS 146.</td>
</tr>
</tbody>
</table>

General Education Core .................................. 22-30
Technical Concentration .................................. 30-54
Total Minimum ............................................. 60
Total Maximum ............................................. 76

Child Development 190708 CHD

Associate in Applied Science Degree

Available: Phil Campbell and Shoals Campus Advisors: D. Durdunji (5450) durdunji@nwccc.edu

This degree is designed to prepare students for employment as teachers or directors in public or private preschool programs, as Head Start teachers or teacher aides, or as teacher assistants in Alabama Pre-K programs in public or private schools. Courses in this program extend beyond the Alabama State Minimum Standards qualifications for directors, program directors, and preschool teachers in licensed child care facilities.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements Semester Hours

| Area I: |
| Written Composition .................................. 6 |
| **ENG 101 English Composition I ..................... 3 |
| **ENG 102 English Composition II .................... 3 |
| Area II: |
| Humanities and Fine Arts ............................ 6 |
| SPH 107 Fundamentals of Public Speaking .......... 3 |
| Fine Arts Elective-Choose one from among .......... 3 |
| ART 100 Art Appreciation |
| MUS 101 Music Appreciation |
| PHL 106 Introduction to Philosophy |
| PHL 206 Ethics and Society |
| REL 100 History of World Religions |
| REL 151 Survey of the Old Testament |
| REL 152 Survey of the New Testament |
| SPA 101 Introductory Spanish I |
| Area III: |
| Natural Sciences and Mathematics .................... 11 |
| Choose one math from among: ....................... 3 |
| MTH 116 Mathematical Applications |
| MTH 100 Intermediate College Algebra |
| MTH 110 Finite Mathematics |
| MTH 112 Precalculus Algebra |
| BIO 103 Principles of Biology I ...................... 4 |
| BIO 104 Principles of Biology II OR |
| PHS 111 Physical Science I ......................... 4 |
| Area IV: |
| History, Social and Behavioral Science ............. 9 |
| PSY 200 General Psychology ......................... 3 |
| SOC 200 Introductory to Sociology ................... 3 |
| SOC 247 Marriage and the Family .................... 3 |
| Area V: |
| Technical Concentration and Electives .............. 36 |
| CIS 146 Microcomputer Applications ................ 3 |
| CHD 100 Introduction to Early Care and Education of Children .................. 3 |
| CHD 201 Child Growth and Development .............. 3 |
| CHD 202 Creative Experiences for Young Children ... 3 |
| CHD 203 Children’s Language Development and Literature .................. 3 |
| CHD 204 Methods and Materials for Teaching Young Children .................. 3 |
| CHD 205 Program Planning for Young Children ....... 3 |
| CHD 206 Health, Safety, and Nutrition ................ 3 |
CHD 208 Administration of Child Development Programs ...........................................3
CHD 209 Infant and Toddler Education Programs ..............................................3
CHD 210 Educating Exceptional Young Children ................................................3
CHD 215 Supervised Practical Experience ................................................................3

General Education Core.........................................................................................33
Technical Concentration.........................................................................................36
Total Semester Credit Hours ..................................................................................69

**Keyboarding skills are essential for the successful completion of English 101.

Child Development Short-Term Certificate 190708 CHD

Available: Phil Campbell and Shoals Campus
Advisors: D. Durdunji (5450) durdunji@nwscc.edu

This short-term certificate is designed to prepare students for employment in preschool programs. Emphasis is upon developing competency in guiding the experience of preschool children. Graduates may be employed as teachers or directors in private and public preschool programs and as aides in Head Start.

Classes in this plan are designed to meet the Alabama state minimum standard qualifications for a director, program director, and teacher in a licensed child care center.

This short-term certificate program offers the student background knowledge of all stages of child growth and development; training and practical experience in conducting all types of learning activities with children; knowledge and application of techniques in positive guidance and discipline, health, safety, and first aid practices; and a basic knowledge of the state minimum standards for daycares centers and homes.

Any person who is interested in the field or desires to enhance his or her knowledge in child care work and has a high school diploma or GED will be eligible for this short-term certificate.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 201 Child Growth and Development Principles</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CHD 202 Children’s Creative Experiences</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CHD 203 Children’s Literature and Language Develop</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CHD 204 Methods and Materials for Teaching Children</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CHD 205 Program Planning for Educating Young Children</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CHD 206 Children’s Health and Safety</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CHD 215 Supervised Practical Experience in Early Childhood Education</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>**CHD Electives</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ..............................................................................28

**CHD Electives
CHD 100 Introduction to Early Care and Education
CHD 208 Administration of Child Development Programs

CHD 209 Infant and Toddler Education Programs
CHD 210 Educating Exceptional Young Children
CHD 214 Families and Communities in Early Care

Computer Information Systems Technology Associate in Applied Science Degree

Available: Shoals Campus
Advisors: T. Roberson (5276) roberson@nwscc.edu
S. Chandler (5234) schandler@nwscc.edu
J. James (6234/5346) jamesje@nwscc.edu
P. Peters (6326) ppeters@nwscc.edu

The CIS Technology degree is designed to prepare students for employment in Information Processing. Graduation from high school or the equivalent qualifies a prospective student for enrollment in CIS Technology. The two-year suggested curriculum is designed to develop computer personnel capable of planning, writing, and installing commercial software on modern database computers. Students pursuing the Personal Computer Systems Option will receive training in electronics and networking technology used on common PC systems. Students pursuing the Programming Option are trained on the IBM AS/400 and/or personal computers.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Programming Option 110101 PO

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORI 107 Student Success</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>**ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102 English Composition II</td>
<td>1</td>
</tr>
<tr>
<td>OR ENG 130 Technical Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Humanities or Fine Arts Elective:</td>
<td>3</td>
</tr>
<tr>
<td>Choose one from among:</td>
<td>3</td>
</tr>
<tr>
<td>ENG 251 American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENG 252 American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENG 261 English Literature I</td>
<td></td>
</tr>
<tr>
<td>ENG 262 English Literature II</td>
<td></td>
</tr>
<tr>
<td>ART 100 Art Appreciation</td>
<td></td>
</tr>
<tr>
<td>MUS 101 Music Appreciation</td>
<td></td>
</tr>
<tr>
<td>PHL 106 Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHL 206 Ethics and Society</td>
<td></td>
</tr>
<tr>
<td>REL 100 History of World Religions</td>
<td></td>
</tr>
<tr>
<td>REL 151 Survey of the Old Testament</td>
<td></td>
</tr>
<tr>
<td>REL 152 Survey of the New Testament</td>
<td></td>
</tr>
<tr>
<td>SPA 101 Introductory Spanish I</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 100 Intermediate College Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History, Social and Behavioral Science Elective:</td>
<td>3</td>
</tr>
<tr>
<td>Choose one from among:</td>
<td>3</td>
</tr>
<tr>
<td>HIS 101 Western Civilization I</td>
<td></td>
</tr>
<tr>
<td>HIS 102 Western Civilization II</td>
<td></td>
</tr>
<tr>
<td>HIS 201 United States History I</td>
<td></td>
</tr>
<tr>
<td>HIS 202 United States History II</td>
<td></td>
</tr>
<tr>
<td>ECO 231 Principles of Macroeconomics</td>
<td></td>
</tr>
</tbody>
</table>

Northwest-Shoals Community College 2015-2016
General Education Core

Technical Concentration

Total Semester Credit Hours

*Courses offered during summer semester only.

**Keyboarding skills are essential for the successful completion of English 101.

***Students without prior computer knowledge or keyboarding should enroll in CIS 096.

**Personal Computers 110101 PCS

**Systems Option

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**General Education Requirements Semester Hours

ORI 107 Student Success ............................................. 1

Area I: Written Composition ....................................... 6

ENG 101 English Composition I ................................... 3
ENG 102 English Composition II or
ENG 130 Technical Report Writing ......................... 3

Area II: Humanities and Fine Arts .............................. 6

SPH 107 Fundamentals of Public Speaking .................... 3
Humans or Fine Arts Elective:
Choose one from among: ........................................... 3

ENG 251 American Literature I
ENG 252 American Literature II
ENG 261 English Literature I
ENG 262 English Literature II
ART 100 Art Appreciation

Area III: Natural Sciences and Mathematics .............. 3

Choose one math from among: .................................. 3

Area IV: History, Social and Behavioral Science ........... 3

Choose one from among: .......................................... 3

Area V: Technical Concentration and Electives .......... 56

BUS 241 Principles of Accounting I OR
ACT 141 Basic Accounting Principles ...................... 3

BUS 242 Principles of Accounting II OR
ACT 142 Accounting Principles II ............................. 3

**CIS 146 Microcomputer Applications .......................... 3

CIS 147 Advanced Microcomputer Applications .......... 3

CIS 148 Post Advanced Microcomputer Applications 3

CIS 150 Introduction to Computer Logic
and Programming ................................................. 3

*CIS 199 Network Communications

OR ILT 135 Local Area Networks .................................. 3

**CIS 205 Control Language Utilities and Applications

CIS 207 Introduction to Web Development ................. 3

CIS 212 Visual Basic Programming ............................. 3

CIS 249 Microcomputer Operating Systems ............... 3

CIS 251 C++ Programming ........................................ 3

CIS 255 JAVA Programming ...................................... 3

CIS 268 Software Support OR ILT 130 Software Installation and
Maintenance ......................................................... 3

CIS 269 Hardware Support OR
ILT 129 Personal Computer Hardware ...................... 3

*CIS 281 Systems Analysis and Design ...................... 3

CIS ELECTIVES ....................................................... 6

*CIS 199 Network Communications OR
ILT 135 Local Area Networks ..................................... 3

CIS 212 Visual Basic Programming ............................. 3

CIS 249 Microcomputer Operating Systems ............... 3

CIS 251 C++ Programming ........................................ 3

CIS 255 JAVA Programming ...................................... 3

CIS 268 Software Support OR ILT 130 Software
Installation and Maintenance ................................... 3

CIS 269 Hardware Support OR
ILT 129 Personal Computer Hardware ...................... 3

*CIS 281 System Analysis and Design ...................... 3

ILT 101 Survey of Electronics ................................... 3

ILT 112 Concepts of Digital Electronics ................... 3

ILT 131 Personal Computer Problem Determination .... 3

CIS ELECTIVES ....................................................... 3

General Education Core .............................................. 19

Technical Concentration ........................................... 56

Total Semester Credit Hours ..................................... 75

* Courses offered during summer semester only.

**Keyboarding skills are essential for the successful completion of English 101.

***Students without prior computer knowledge or keyboarding should enroll in CIS 096.
Computer Technology 110101 PCH

**Computer Technology PC Hardware Technician Short-Term Certificate**

Available: Shoals Campus
Advisors: S. Chandler (5234) schandler@nwscc.edu
T. Roberson (5276) roberson@nwscc.edu
J. James (6234/5346) jamesje@nwscc.edu
P. Peters (6326) ppeters@nwscc.edu

Almost all businesses today utilize microcomputers in their operations, whether they are large or small businesses. The investment they have made in microcomputers requires ongoing maintenance and service. The need for qualified technicians is continually expanding. These technicians need to know how to diagnose, configure, install, upgrade, and service industry standard microcomputers. This program is designed to provide the skills needed to become employed as a PC Hardware Technician.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS 146 Microcomputer Applications</strong> or ILT 175 Computer Fundamentals for Technology Students</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*CIS 199 Network Communications or ILT 135 Local Area Networks</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 150 Intro to Computer Logic and Programming</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 249 Microcomputer Operating Systems</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268 Software Support or ILT 130 Software Installation and Maintenance</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 269 Hardware Support or ILT 129 Personal Computer Hd.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ILT 101 Survey of Electronics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ILT 112 Concepts of Digital Circuits</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>ILT 131 Personal Computer Problem Determination</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** ................................................. **30**

* Course offered during summer semester only.

**Students without prior computer knowledge or keyboarding should enroll in CIS 096.**

---

Computer Technology 110101 PST

**Computer Technology PC Software Technician Short-Term Certificate**

Available: Shoals Campus
Advisors: S. Chandler (5234) schandler@nwscc.edu
T. Roberson (5276) roberson@nwscc.edu
J. James (6234/5346) jamesje@nwscc.edu
P. Peters (6326) ppeters@nwscc.edu

The rapid expansion of microcomputer systems in all phases of business operations has generated a demand for knowledgeable technicians who can install, upgrade, service, and support industry standard software for microcomputers. This program will train the student to use PC operating systems, word processing, spreadsheets, database, and other related software tools which are commonly used in business.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Theory</th>
<th>Lab</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS 146 Microcomputer Applications</strong></td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 147 Advanced Microcomputer Applications</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*CIS 148 Post Advanced Microcomputer Applications</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 207 Introduction to Web Development</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 249 Microcomputer Operating Systems</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268 Software Support or ILT 130 Hardware Support and Installation and Maintenance</td>
<td>2-3</td>
<td>3-0</td>
<td>3</td>
</tr>
<tr>
<td>CIS 281 System Analysis and Design</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 246 Mathematics of Finance or MTH 116 Mathematical Appl.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** ................................................. **25**

* Course offered during summer semester only.

**Students without prior computer knowledge or keyboarding should enroll in CIS 096.**
Criminal Justice 430107 CRJ

Associate in Applied Science Degree

Available: Phil Campbell and Shoals Campuses
Advisor: E. Bowen (5303) eddie.bowen@nwsc.edu
K. Brackins (6242) kbrackins@nwsc.edu

This degree is designed for students entering into Criminal Justice careers, particularly for those interested in law enforcement. Although many of the courses in this career program may transfer to four-year institutions, this program is not designed for transfer. This program does not include many courses that four-year institutions require in their general education program.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 English Composition I</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>ENG 102 English Composition II</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities or Fine Arts Elective:
Choose one from among:
- ENG 251 American Literature I
- ENG 252 American Literature II
- ENG 261 English Literature I
- ENG 262 English Literature II
- ART 100 Art Appreciation
- MUS 101 Music Appreciation
- PHL 106 Introduction to Philosophy
- PHL 206 Ethics and Society
- REL 100 History of World Religions
- REL 151 Survey of the Old Testament
- REL 152 Survey of the New Testament
- SPA 101 Introductory Spanish I

<table>
<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>3</td>
</tr>
<tr>
<td>OR MTH 246 Mathematics of Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>POL 211 American Government or U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>SOC 200 Introduction to Sociology</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Area V: Technical Concentration and Electives</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 146 Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>HED 231 First Aid</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 100 Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>CRJ 110 Introduction to Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 140 Criminal Law and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 146 Criminal Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 216 Police Organization and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 220 Criminal Investigation</td>
<td>3</td>
</tr>
</tbody>
</table>

Criminal Justice Courses are offered on the Phil Campbell campus depending on student demand.

*Students who have successfully completed the Police Academy (as established by the Alabama Police Officers and Training Commission) may be given credit for CRJ 110 and CRJ 116 with the approval of the CRJ advisor.

**Keyboarding skills are essential for the successful completion of English 101.

Design Engineering 151301 D&D Technology

Associate in Applied Science Degree

Available: Shoals Campus
Advisor: A. Rice (5257) arice@nwsc.edu

Design Engineering prepares students for the manufacturing and construction industry. Today, the drafter is a highly skilled technician with an ability to visualize objects three dimensionally before they are physically created. By using traditional manual tools or computer-assisted methods, the drafter creates drawings that describe the shape and size of the product or project.

Design Engineering instruction at the College is offered in fundamental, intermediate, and advanced levels of drafting and design. Advanced courses train students for the development of drawings in mechanical and architectural design. Related studies prepare the student academically in mathematics, physics, psychology, and English.

A graduate of the program will be generally qualified to enter the industry as an entry level drafts-person, detailer, or apprentice designer. Graduates are encouraged to continue education toward a professional degree in engineering or architecture.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements

<table>
<thead>
<tr>
<th>Area I: Written Composition</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101 English Composition I</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Area II: Humanities and Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities or Fine Arts elective: Choose one from among:</td>
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</table>

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<thead>
<tr>
<th>Area III: Natural Sciences and Mathematics</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 103 Introduction to Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 118 Technical Mathematics</td>
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</table>

<table>
<thead>
<tr>
<th>Area IV: History, Social and Behavioral Science</th>
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<tbody>
<tr>
<td>PSY 115 Technical Physics</td>
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</table>

<table>
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<tr>
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Criminal Justice Courses are offered on the Phil Campbell campus depending on student demand.

*Students who have successfully completed the Police Academy (as established by the Alabama Police Officers and Training Commission) may be given credit for CRJ 110 and CRJ 116 with the approval of the CRJ advisor.

**Keyboarding skills are essential for the successful completion of English 101.
DDT 104 Basic Computer Aided Drafting and Design 1 4 3

DDT 111 Fundamental Drafting and Design 1 4 3

DDT 117 Manufacturing Processes 3 0 3

DDT 124 Intro to Technical Drawing 1 4 3

DDT 127 Intermediate Computer Aided Drafting and Design 1 4 3

DDT 128 Intermediate Technical Drawing 1 4 3

DDT 131 Machine Drafting Basics 1 4 3

DDT 132 Architectural Drafting 1 4 3

DDT 134 Descriptive Geometry 1 4 3

DDT 181E Special Topics-Work Ethics 3 0 3

DDT 211 Intermediate Machine Drafting 1 4 3

DDT 220 Advanced Technical Drafting 1 4 3

DDT 231 Advanced CAD 1 4 3

DDT 233 Solids Modeling 1 4 3

DDT 227 Strengths of Material 4 0 4

Drafting and Design Electives X X 8

General Education Core ................................................... 23
Technical Concentration ................................................... 3
Total Semester Credit Hours ........................................... 54

Note: Three Drafting Electives totaling 8 semester hours are required. Students should consult advisor concerning other possible electives from other program areas.

*Students who have completed ENG 130 prior to Spring 2000, and students substituting ENG 102 must take Speech.

**Computer competency skills are embedded within one or more courses required in this curriculum.

***Keyboarding skills are essential for the successful completion of English 101.

Computer Aided Design 151301 DDT
Engineering Technology
Short-Term Certificate

Available: Shoals Campus
Advisor: A. Rice (5257) rice@nwscc.edu

This short-term certificate is open to drafting and design industry personnel with a minimum of one year experience in manual drafting, design, or engineering. The program provides upgrade training in the use of computer aided drafting and design (CADD) technology.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

DDT 231 Advanced CAD 1 4 3

Drafting and Design Elective X X 6

Total Semester Credit Hours ........................................... 16

NOTE: Two Drafting electives totaling 6 semester hours are required. Students should consult advisor concerning other possible electives from other program areas.

Electronics Technology 470105 ILT
Associate in Applied Science Degree

Available: Shoals Campus
Advisors: R. Reaves (5201) rgr@nwscc.edu

This degree is designed to provide the student with proficiency in electronic devices and equipment. Theory and laboratory courses in basic electronics, electronic circuits, communications, computers, and industrial electronics, as well as general education courses in math, English, physics, psychology, and humanities provide the knowledge and skills necessary to gain employment in electronics with opportunities to advance to positions of greater responsibility.

The degree prepares the student to observe necessary safety precautions; assemble, install, operate, troubleshoot, repair, maintain, calibrate, and modify electronic circuitry, equipment and systems; construct breadboards and mock-ups; set up test apparatus, conduct tests, and analyze test results; prepare reports, sketches, graphs, and schematic drawings; and perform necessary mathematical calculations.

All entering students are required to complete ORI 107 unless transferred from another university or college.

Semester

General Education Requirements

ORI 107 Student Success ........................................... 1

Area I: Written Composition .................................... 6

**ENG 101 English Composition I .................. 3

*ENG 130 Technical Report Writing .................. 3

Area II: Humanities and Fine Arts .................... 3

Humanities or Fine Arts Elective:
Choose one from among: .................................... 3

ENG 251 American Literature I
ENG 252 American Literature II
ENG 261 English Literature I
ENG 262 English Literature II
ART 100 Art Appreciation
MUS 101 Music Appreciation
PHL 106 Introduction to Philosophy
PHL 206 Ethics and Society
REL 100 History of World Religions
REL 151 Survey of the Old Testament
REL 152 Survey of the New Testament
SPA 101 Introductory Spanish I

Area III: Natural Sciences and Mathematics ........ 10

MTH 103 Introduction to Technical Mathematics ........ 3

MTH 118 Technical Mathematics .................. 3

Area IV: History, Social, and Behavioral Science .......... 3

PSY 200 General Psychology .................. 3

Area V: Technical Concentration and Electives .... 54

Semester
Program of biomedical equipment.

The complexity of biomedical equipment demands the availability of settings.

Technology

Electronic Drafting

Microprocessors

Microprocessors Lab

Microprocessor Systems Troubleshooting

RF Communications

RF Communications Lab

Electronics Electives

General Education Core

Technical Concentration

Total Semester Credit Hours

NOTE: Two Electronics Electives totaling 6 semester hours are required.

Student should consult advisor concerning possible electives from other program areas.

*Students who have completed ENG 130 prior to Spring 2000, and students substituting ENG 102 must take Speech.

**Computer competency skills are embedded within one or more courses required in this curriculum.

***Keyboarding skills are essential for the successful completion of English 101.

Biomedical Equipment Technology

Short-Term Certificate

Available: Shoals Campus

Advisor: R. Reaves (5201) rgr@nwscc.edu

This advanced certificate, in addition to the Electronics Technology Associate in Applied Science Degree, will prepare the student for employment in both the medical and industrial settings as biomedical equipment technicians. The increasing complexity of biomedical equipment demands the availability of highly skilled technicians, knowledgeable in the theory of application, underlying physiological principles, and safe application of biomedical equipment. To enter this certificate program, the student must have program advisor approval and have satisfactorily completed the requirements for the Electronics Technology AAS Degree at the College.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILT 106 Concepts of Direct Current</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>ILT 107 Concepts of Alternating Current</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>ILT 112 Concepts of Digital Circuits</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>ILT 113 Concepts of Electronic Circuits</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>ILT 125 Digital Communications</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>ILT 126 Digital Communications Lab</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>ILT 133 Electronic Drafting</td>
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<td>3</td>
</tr>
<tr>
<td>ILT 164 Circuit Fabrication I</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ILT 194 Intro to Programmable Logic Controllers</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ILT 201 Industrial Electronics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>ILT 202 Industrial Electronics Lab</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>ILT 205 Microprocessors</td>
<td>3</td>
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<tr>
<td>ILT 206 Microprocessors Lab</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>ILT 234 Microprocessor Systems Troubleshooting</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ILT 267 RF Communications</td>
<td>3</td>
<td>0</td>
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<tr>
<td>ILT 268 RF Communications Lab</td>
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<td>6</td>
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<tr>
<td>Electronics Electives</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

ILT 226 BMET Certification Preparation

ILT 294 Biomedical Electronics

ILT 295 Biomedical Electronics

Total Semester Credit Hours

Emergency Medical Services

Associate in Applied Science Degree

Available: Shoals Campus

Advisors: M. Simpson (5435) msimpson@nwscc.edu

T. Oyen (5437) oyen@nwscc.edu

C. DeMorse (5336) cdemorse@nwscc.edu

NOTE: The Alabama Community College Systemized curriculum is continuing to be reviewed and analyzed. Modifications will be made as needed.

EMS admission criteria, the progression guidelines, and the curriculum are currently under review and are subject to change. Please see the EMS Program Director with any questions or concerns.

The Division of Health Studies offers the Emergency Medical Services Program. The EMS program is designed to prepare qualified applicants in basic and advanced emergency care in clinical and in field environments. Graduates qualify for employment with fire and rescue departments, ambulance services, industries, and emergency departments within medical facilities. EMS education spans four levels of competency. Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), and Paramedic. Each level of competency meets or exceeds standards identified in the National Emergency Medical Services Education Standards by the National Highway Traffic Safety Administration and by the State of Alabama Department of Public Health.

Students may enroll in the EMS program with the intention of completing only the courses required for each level of EMS education. Students are not required to complete EMR for admission into the EMT program. Upon successful completion of each level, the student will be eligible to apply for registration with the National Registry of EMTs. Graduation from the program, however, does not guarantee licensure from the Alabama Department of Public Health Office of EMS and Trauma or the ability to take the National Registry of EMT examination.

The Emergency Medical Services Program supports the philosophy and purpose of the College and serves its community by preparing entry level Emergency Medical Services personnel in varied health settings. The EMS Program Director, Medical Director, EMS Faculty, and the EMS Advisory Committee have the responsibility for administering and evaluating the Emergency Medical Services Program according to policies and guidelines established by the College, the Alabama Department of Public Health, and the Commission on Accreditation of Allied Health Education Programs in association with the Committee on Accreditation of Educational Programs for the Emergency
Medical Services Professions (CoAEMSP).

To receive an Associate of Applied Science Degree in Emergency Medical Services, the student must complete the EMT, AEMT, and Paramedic certificate levels and all academic core curriculum course requirements. All EMS students must take all parts of the COMPASS placement test. Students completing the tests should see the Program Director for placement into English and math classes.

Because EMS programs contain a clinical component, students are required to meet additional health requirements as well as the “Essential Functions of the EMT.” Questions regarding the EMS program should be directed to the Program Director at 256.331.5435

The Purpose of the Emergency Medical Services Program is to:
1. Prepare entry level Emergency Services Personnel who utilize appropriate knowledge and skills to deliver safe, competent care to clients of all ages
2. Foster learning as a life-long process to remain competent
3. Prepare entry level Emergency Services Personnel who contribute to society as citizens and members within the discipline of EMS
4. Provide education at the certificate and the Associate Degree level, which forms a basis for entry into baccalaureate EMS education

APPROVALS AND ACCREDITATION

The Emergency Medical Services Program is state approved by the Alabama Department of Public Health Office of EMS and Trauma.

To contact Alabama Department of Public Health Office of EMS and Trauma:
201 Monroe Street, Montgomery, Alabama 36104
Telephone: 334.206.5383 Fax: 334.206.5260
http://www.adph.org/ems/

The Emergency Medical Services Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
1361 Park Street, Clearwater, Florida 33756
Telephone: 727-210-2350 Fax: 727-210-2354
www.caahep.org

To contact CoAEMSP:
8301 Lakeview Parkway Suite 111-312
Rowlett, TX 75088
Telephone: 214-703-8445 Fax: 214-703-8992
www.coaemsp.org

ADMISSION PROCEDURES AND REQUIREMENTS

Admission to the EMS program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. Preference will be given to graduates/students of Northwest-Shoals Community College EMT and AEMT Programs. Applicants will be notified by the EMS office of acceptance into the EMS program. The College reserves the right to adjust requirements or use additional criteria to determine admission.

*A list of fees/approximate costs may be obtained from the EMS Office.*

General Admission Requirements

To be eligible to enroll in the EMS Program, a student must complete the following:
1. Unconditional admission to the College
2. Good standing with the College
3. Receipt of completed application for the Emergency Medical Services Program by specified deadline. (Late applications may be considered dependent upon faculty and clinical facilities that are available)
4. Be a high school graduate or hold a GED; Complete the ACT or COMPASS/ASSET placement test
5. Meet the Essential Functions for the Emergency Medical Services Program

The student’s ability to comply with the Essential Functions may be evaluated by the EMS faculty at any time that a student’s ability to do so is in question.

Upon admission, an individual who discloses a disability can request reasonable accommodations. Individuals will be asked to provide documentation of the disability in order to assist with the provision of appropriate reasonable accommodations. The respective College will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program or provide accommodations that inflict an undue burden on the respective College. In order to be admitted, one must be able to perform all of the essential functions with or without reasonable accommodations. If an individual’s health changes during the program of learning so that the essential functions cannot be met with or without reasonable accommodations, the student will be withdrawn from the EMS program. The EMS faculty reserves the right at any time to require an additional medical examination at the student’s expense in order to assist with the evaluation of the student’s ability to perform the essential functions.

Requests for reasonable accommodations should be directed to the ADA Coordinator, Crystal Ingle, at 256.331.5249 or cingle@nwccc.edu
6. Be at least 18 years old (younger students who meet certain conditions may be able to enroll with the permission of the Program Director)
7. Possess a valid driver’s license
8. Hold current BLS - CPR course completion at the provider level. American Red Cross course equivalent is Professional Rescuer. Community CPR is not acceptable. Students will be allowed to enter the EMT program without CPR completion provided he/she enrolls in a CPR class prior to beginning clinical rotations. The CPR course is provided by the EMS Department;
9. Present evidence of health insurance or sign a waiver
must successfully complete this course and meet additional requirements by the Alabama Department of Public Health Office of EMS and Trauma. The EVOC course is provided by the EMS Department

Meeting minimal requirements does not guarantee acceptance. A list of anticipated expenses can be obtained from the EMS Program Office. Students are responsible for transportation, meals, health care expenses, and any liability incurred during and while traveling to and/or from educational experiences.

Unconditional Admission to the EMT Program
In addition to General Admission Requirements the student must:
1. Submit EMS Program Application and receive approval by the EMS Program Director
2. Successfully complete Background Check with no findings
3. Complete ASSET/COMPASS/ACT testing
4. Register and submit payment for courses
5. Attend and complete EMS Program Orientation

Unconditional Admission to the AEMT Program
In addition to General Admission Requirements the student must:
1. Submit EMS Program Application and receive approval by the EMS Program Director
2. Successfully complete Background Check with no findings
3. Complete ASSET/COMPASS/ACT testing
4. Register and submit payment for courses
5. Complete EMT Program
6. Successfully complete NREMT Examination
7. Hold Alabama EMT licensure
8. Attend and complete EMS Program Orientation

Unconditional Admission to the Paramedic Program
In addition to General Admission Requirements the student must:
1. Submit EMS Program Application and receive approval by the EMS Program Director
2. Successfully complete Background Check with no findings
3. Complete ASSET/COMPASS/ACT testing
4. Register and submit payment for courses
5. Hold Alabama AEMT licensure
6. Completed EMS 189 or BIO 201 with a grade of “C” or better
7. Completed EMS Program Entrance Examination (Fee is associated with this examination)
8. Have a minimum of 2.0 for EMS coursework and required academic coursework for the last 24 hours
9. Attend and complete EMS Program Orientation
10. If applicable, complete any required remedial coursework for Math 100 and English 101

Conditional Admission may be granted based upon the discretion of the EMS Program Director. Students allowed to enroll with conditional admission will be assigned to the current cohort for the date when all requirements have been met.

Upon successful completion of each level, the student will be eligible to apply for registration with the National Registry of EMTs. Graduation from the program, however, does not guarantee licensure from the Alabama Department of Public Health Office of EMS and Trauma or the ability to take the National Registry of EMT examination.

Paramedic program students can complete requirements for a Certificate or AAS Degree.

PARAMEDIC CERTIFICATE OPTION
In addition to the general admission requirements, students admitted to the Paramedic certificate program must:
1. Complete ENG 101 and MTH 100 with a grade of “C” or better prior to the last semester of the Paramedic program
2. Students electing to take BIO 201 must also complete BIO 202 with a grade of “C” or better for the certificate option

AAS DEGREE OPTION
In addition to the general admission requirements, students admitted to the degree tract must:
1. Complete ENG 101 and MTH 100 with a grade of “C” or better prior to the last semester of the Paramedic Program
2. Complete BIO 201 and BIO 202 with a grade of “C” or better for the AAS Degree
3. Complete additional General Education Requirements: ENG 102 or SPH 107, PSY 200, and a Humanities Elective

PROGRAM CONTINUATION
In order to continue in the EMT, Advanced EMT, or Paramedic courses, the student must complete the following:
1. Complete and submit the physical examination form and required data PRIOR to attendance at clinical. The student must present written documentation on College forms of a physical examination within the last 12 months by a licensed practicing physician. In addition, the student must:
   a. Be free from any communicable disease
   b. Possess eyesight in a minimum of one eye correctable to 20/20 vision, have approximately one hundred and eighty (180) degrees peripheral vision capability and have adequate color perception
   c. Complete a health history, verifying such information as immunization and disease history and special medical needs
   d. Receive (at student expense) necessary immunizations/tests including hepatitis vaccine
   e. Demonstrate the ability to send and receive messages
2. Meet “Essential Functions of the EMT” with or without accommodations by assigned date. A copy of these functions is available upon request
3. Purchase professional liability insurance through the College
4. Complete drug testing and/or background checks as directed by the Health Studies Division or clinical agency
5. The EMS Program grading scale is:
   100 – 90 = A
   89 – 80 = B
   79 – 75 = C
   74 – 60 = D
   59 and below = F
6. Receive a grade of “C” in each EMS or EMP course in order to continue
7. Earn a satisfactory clinical evaluation on the clinical component of any course with a clinical component
8. Be accepted by clinical agencies for clinical experiences
NOTE: Northwest-Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by a clinical agency. A student who is refused use of a facility is considered refused by all agencies associated with the program. Therefore, the program is not required to find an alternative site.

TRANSFER STUDENTS
Students who wish to transfer must:
1. Meet general and unconditional admission and progression requirements for NW-SCC and the EMS program
2. Successfully complete the program:
   a. Within one year of initial entry for the EMT program (otherwise all EMT courses must be repeated)
   b. Within one year of initial entry for the Advanced EMT program (otherwise all EMT courses must be repeated)
   c. Within two years of initial entry for the Paramedic program (otherwise all Paramedic courses must be repeated)
3. Be a student in good standing with the previous institution(s)
4. Have Director of previous EMS program provide a letter of good standing in previous EMS program
5. Complete skill validation requirements
6. Provide clinical documentation (example: FISDAP or data on a signed EMS Program letterhead of previous institution) for consideration
7. Be accepted by clinical agencies for clinical experiences

NOTE: Northwest-Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by a clinical agency. A student who is refused use of a facility is considered refused by all agencies associated with the program. Therefore, the program is not required to find an alternative site.

PROGRAM PROGRESSION POLICY
In order to continue in the EMS program, the student must:
1. Complete all required general education courses according to The Alabama College System EMS Education curriculum
2. Maintain a grade of "C" or better in all required EMS courses and maintain a 2.0 GPA at NW-SCC
3. Be accepted by clinical agencies for clinical experiences

NOTE: Northwest-Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by a clinical agency. A student who is refused use of a facility is considered refused by all agencies associated with the program. Therefore, the program is not required to find an alternative site.

4. Earn a satisfactory clinical evaluation in all EMS courses with a clinical component
5. Maintain ability to meet essential functions for EMS with or without reasonable accommodations
6. Maintain current CPR at the health care provider level
7. Maintain an adequate level of health including but not limited to annual PPD, and freedom from chemical dependency and/or mental disorder
8. Successfully complete the EMS education program:
   a. Within one year of initial entry for the EMT program (otherwise all EMT courses must be repeated)
   b. Within one year of initial entry for the Advanced EMT program (otherwise all EMT courses must be repeated)
   c. Within two years of initial entry for the Paramedic program (otherwise all Paramedic course must be repeated)

A student that has an unsuccessful attempt in an EMS course (W, D, or F) cannot progress until the course is completed successfully. Course repetition will be based on instructor availability and program resources. Withdrawal and/or a D or F in one or more EMS courses in a term is considered one unsuccessful attempt. A grade of "I" may prevent the student from progression and will be evaluated by the faculty, program director, and medical director.

REINSTATEMENT (READMISSION) POLICY
In order to continue in the EMS program the student must:
1. Students whose progression through EMS is interrupted and who desire to be reinstated in the program must schedule an appointment with an EMS faculty advisor to discuss reinstatement. In order to be eligible for reinstatement, the following criteria must be met:
   a. Apply for readmission to the college if not currently enrolled
   b. Submit application requesting reinstatement to the EMS program
   c. Request reinstatement within one year from the term of withdrawal or failure
   d. Demonstrate competency in previous EMS courses. This may be evaluated by testing and/or skills validation
   e. Adhere to EMS curriculum and/or program policies and procedures effective at the point of reinstatement
2. Reinstatement to the EMS program is not guaranteed
3. Reinstatement will be denied due to, but not limited to any of the following circumstances:
   a. Grade point average is less than 2.0 from courses completed at the current institution
   b. Refusal by clinical agencies to accept the student for clinical experiences
   c. Twelve months have elapsed since the student was enrolled in an EMS course
   d. Student has been dismissed from the program for a violation of the College/EMS Program handbook
   e. Student dismissed from the program for disciplinary reasons and/or unsafe/unsatisfactory client care
4. Students who are unsuccessful on the third (3rd) admission will be dismissed from the EMS program
5. Students who have three unsuccessful attempts in any EMS program course may apply for admission as a new student provided:
   a. the student meets current entry requirements
   b. at least two years have elapsed since the student’s dismissal from the last program and
   c. the student was not dismissed from the previous program for disciplinary reasons or for unsafe/unsatisfactory client care in the clinical area

STANDARDS OF CONDUCT
The EMS student shall comply with the standards that determine acceptable behavior of a healthcare professional in accordance with the Alabama Department of Public Health
Office of EMS and Trauma, National Registry of EMTs, and EMS Program.

FAILURE TO COMPLY WITH ANY OF THESE 7 STANDARDS WHILE IN THE EMS PROGRAM CONSTITUTES GROUNDS FOR DISMISSAL FROM THE PROGRAM

The following examples of behavior may be grounds for dismissal from the EMS program or for licensure application review by the Alabama Department of Public Health Office of EMS and Trauma. Any individual who:
1. Is guilty of fraud or deceit in procuring or attempting to procure a license
2. Is guilty of a crime involving moral turpitude or of gross immorality that would tend to bring reproach upon the EMS profession
3. Is unfit or incompetent due to the use of alcohol, or is addicted to the use of habit-forming drugs to such an extent as to render the licensee unsafe or unreliable
4. Is mentally incompetent
5. Is guilty of unprofessional conduct of a character likely to deceive, defraud, or injure the public in matters pertaining to health
6. Has willfully or repeatedly violated any of the provisions of this act
7. Has been convicted of a felony
8. Has been convicted of any violation of a Federal or State law relating to controlled substances
9. Has any other reasons authorized by law
10. Has been placed on a State and/or Federal abuse registry
11. Has been court martialed or disciplined or administratively discharged by the military

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

EMERGENCY MEDICAL SERVICES 510904 EMT

EMT CERTIFICATE
The EMT Certificate is one semester in length and consists of the following courses, which are taught concurrently and must be successfully completed for eligibility to apply for registration for examination with NREMT.

EMS 118 Emergency Medical Technician ......................... 9
EMS 119 Emergency Medical Technician Clinical ................1

Total Semester Credit Hours ........................................ 10

NOTE: EMS 100 and EMS 107 are not required for graduation but are required for clinicals and by the State of Alabama to obtain licensure.

EMERGENCY MEDICAL SERVICES

AEMT CERTIFICATE 510904 EMA

The AEMT Certificate is one semester in length and consists of the following courses, which are taught concurrently and must be successfully completed for eligibility to apply for registration for examination with NREMT. Students must have completed EMT coursework with a grade of “C” or better for enrollment eligibility for the AEMT program.

EMS 155 Advanced EMT Theory and Lab ...................... 8
EMS 156 Advanced EMT Clinical Competencies ............... 2

Total Semester Credit Hours ........................................ 10

NOTE: Students intending to complete Paramedic training are encouraged to complete EMS 189 or BIO 201 in addition to the AEMT coursework. Students are required to have Alabama EMT licensure to complete EMS 156.

EMERGENCY MEDICAL SERVICES

PARAMEDIC CERTIFICATE 510904 EMS

The Paramedic Certificate is three semester in length and consists of the following courses, which are taught concurrently and must be successfully completed for eligibility to apply for registration for examination with NREMT.

Semester 1
EMS 240 Paramedic Operations .................................. 2
EMS 241 Paramedic Cardiology ................................... 3
EMS 242 Paramedic Patient Assessment ......................... 2
EMS 243 Paramedic Pharmacology .............................. 1
EMS 244 Paramedic Clinical I ..................................... 1
MTH 100 Intermediate College Algebra ....................... 3
BIO 202 Human Anatomy and Physiology II * ............. 4
Semester Total (with MTH 100 & BIO 202) ..................... 16

*Students completing EMS 189 are not required to complete BIO 202 for the Paramedic Certificate Program.

Semester 2
EMS 245 Paramedic Medical Emergencies .................... 3
EMS 246 Paramedic Trauma Management ..................... 3
EMS 247 Paramedic Special Populations ....................... 2
EMS 248 Paramedic Clinical II ................................... 3
ENG 101 English Composition ................................... 3
Semester Total (with ENG 101) ................................... 14

Semester 3
EMS 253 Paramedic Transition to the Workforce ............ 2
EMS 254 Advanced Competencies for Paramedic ........... 2
EMS 255 Paramedic Field Preceptorship ....................... 5
EMS 256 Paramedic Team Leadership ......................... 1
Semester Total ......................................................... 10

EMERGENCY MEDICAL SERVICES

ASSOCIATE IN APPLIED SCIENCE 510904 EMP

The Associate in Applied Science Degree is completed in five semesters to include EMT and AEMT consists of the following courses, which are taught concurrently and must be successfully completed for eligibility to apply for registration for examination with NREMT.
CAREER, TECHNICAL AND OCCUPATIONAL PROGRAMS

Environmental Health and Safety Technician Associate in Applied Science Degree

Available: Shoals Campus
Advisors: C. Eubanks (5293) eubanks@nwsc.edu

This degree is designed to prepare students for employment as Environmental, Health and Safety Technicians. Students will be trained in the use and application of environmental technology, as well as the management and support of industrial safety processes. Also see the A.S. degree program.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements Semester Hours

ORI 107 Student Success ............................................ 1

Area I: Written Composition .................................... 6
**ENG 101 English Composition I .............................. 3
*ENG 130 Technical Report Writing .......................... 3

Area II: Humanities and Fine Arts ............................ 6
*Speech Elective: Choose one from among: ............... 3
ART 100 Art Appreciation
MUS 101 Music Appreciation
PHL 106 Introduction to Philosophy
PHL 206 Ethics and Society
REL 100 History of World Religions
REL 151 Survey of the Old Testament
REL 152 Survey of the New Testament
SPA 101 Introductory Spanish

Area III: Natural Sciences and Mathematics ............... 19
MTH 103 Introduction to Technical Mathematics .......... 3
BIO 103 Principles of Biology I .................................. 4
BIO 201 Human Anatomy and Physiology I ............... 4
CHM 104 Introduction to Inorganic Chemistry ............ 4
CHM 105 Introduction to Organic Chemistry ............. 4

Area IV: History, Social and Behavioral Science ......... 3
History, Social and Behavioral Science Elective:
Choose one from among: ........................................... 3
HIS 101 Western Civilization I
HIS 102 Western Civilization II
HIS 201 United States History I
HIS 202 United States History II
ECO 231 Principles of Macroeconomics
ECO 232 Principles of Microeconomics
GEO 100 World Regional Geography
POL 100 American National Government
PSY 200 General Psychology
SOC 200 Human Growth and Development
SOC 247 Introduction to Sociology
SOC 210 Social Problems

Area V: Technical Concentration and Electives .......... 36

CIS 146 Microcomputer Applications .......................... 3
EVT 101 Introduction to Environmental Science and ... Technology OR PHS 120 Environmental Science ........ 4
EVT 105 Introduction to Occupational Safety and ...... 3
Health ........................................................................
EVT 107 Environmental Health and Safety ............... 3
Assessments and Reporting .................................... 3
EVT 110 Introduction to Environmental Laws and Regulations ........................................... 3
EVT 201 Environmental Internship I ........................ 3
EVT 210 Environmental Sampling and Analysis .......... 4
EVT 220 Toxicology .................................................. 3
EVT 250 Hazardous Waste Operations and Emergency Response ........................................ 4
EVT 260 Introduction to Industrial Hygiene ............. 3
EVT 280 Hazardous Materials Management ............ 3

General Education Core ............................................ 35
Technical Concentration .......................................... 36
Total Semester Credit Hours .................................... 71

Northwest-Shoals Community College 2015-2016
**Keyboarding**

*Students planning to transfer should take ENG 102 and SPH 107.  
**Keyboarding skills are essential for the successful completion of English 101.

**Environmental, Health & Safety 150507 EHS Technician**

**Short-Term Certificate**

Available: Shoals Campus  
Advisor: C. Eubanks (5293) eubanks@nwsc.edu

This short-term certificate is designed to prepare students for employment as Environmental, Health and Safety Technicians. Also, see the A.S. & A.A.S. Degree Programs.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 104 Introduction to Inorganic Chemistry</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>EVT 101 Introduction to Environmental Science and Technology or PHS 120 Environmental Science</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>EVT 105 Introduction to Occupational Safety and Health</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>EVT 107 Environmental Health and Safety Assessments and Reporting</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>EVT 110 Introduction to Environmental Laws and Regulations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>EVT 250 Hazardous Waste Operations and Emergency Response</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>EVT 260 Introduction to Industrial Hygiene</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** ................................................... 25

**Industrial Systems Technology 470303 IAR Associate in Applied Science Degree**

**Air Conditioning and Refrigeration Option**

Available: Shoals Campus  
Advisors: S. Harrison (5250) sam@nwsc.edu  
G. Springer (8088) gspringer@nwsc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology. A student who graduates in the program should be able to install and maintain all types of HVAC units.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education Requirements</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Area I: Written Composition</strong></td>
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<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102 English Composition II OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 130 Technical Reporting Writing OR</td>
<td>3</td>
</tr>
<tr>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td><strong>Area II: Humanities and Fine Arts</strong></td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Elective: Choose one from among:</td>
<td>3</td>
</tr>
<tr>
<td>ART 100 Art Appreciation</td>
<td></td>
</tr>
</tbody>
</table>

**Industrial Systems Technology 470303 IEO Associate in Applied Science Degree**

**Electrical Option**

Available: Shoals Campus  
Advisors: S. Harrison (5250) sam@nwsc.edu  
G. Springer (8088) gspringer@nwsc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology with a total focus on electrical systems. A student who graduates in the program should be able to install and maintain all types of plant electrical systems.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education Requirements</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Area I: Written Composition</strong></td>
<td>6</td>
</tr>
</tbody>
</table>
ENG 101 English Composition I ........................................ 3
ENG 102 English Composition II OR
ENG 130 Technical Reporting Writing OR SPH 107
Fundamentals of Public Speaking ....................................... 3

**Area II: Humanities and Fine Arts .......................... 3**
Fine Arts Elective: Choose one from among: ....................... 3
ART 100 Art Appreciation
MUS 101 Music Appreciation
PHL 106 Introduction to Philosophy
PHL 206 Ethics and Society
REL 100 History of World Religions
REL 151 Survey of the Old Testament
REL 152 Survey of the New Testament
SPA 101 Introductory Spanish I

**Area III: Natural Sciences and Mathematics .......... 10**
MTH 100 Intermediate College Algebra OR MTH 103
Introduction to Technical Mathematics .......................... 3
MTH 112 Precalculus Algebra OR MTH 118
Technical Mathematics .................................................. 3
PH 115 Technical Physics ................................................. 4

**Area IV: History, Social and Behavioral Science ... 3**
History: Choose one from among: ................................ 3
HIS 101 Western Civilization I
HIS 102 Western Civilization II
HIS 201 United States History I
HIS 202 United States History II

**Area V: Technical Concentration and Electives .... 53**
INT 113 Industrial Motor Control I ................................ 3
INT 118 Fundamentals of Industrial Hydraulics and Pneumatics 3
INT 120 Concepts of Direct Current ................................. 5
INT 122 Concepts of Alternating Current ......................... 5
INT 123 Concepts of Solid State Electronics ..................... 5
INT 130 Concepts of Digital Electronics .......................... 5
INT 158 Industrial Wiring I ............................................. 3
INT 161 Blueprint Reading for Industrial Technicians .. 3
INT 184 Introduction to Programmable Logic Controllers 3
INT 206 Industrial Motors I ........................................... 3
INT 207 Industrial Automatic Controls ........................... 3
INT 211 Industrial Motors II .......................................... 3
INT 213 Industrial Motor Control II ................................. 3
INT 280C Special Topics in Industrial Maintenance Technology .................. 3
INT 284 Advanced Programmable Logic Controllers . 3

**General Education Core............................................... 23**
**Technical Concentration................................................ 53**
**Total Semester Credit Hours ...................................... 76**

**Industrial Systems Technology 470303 IMO**

**Associate in Applied Science Degree**

**Mechanical Option**
Available: Shoals Campus
Advisors: S. Harrison (5250) sam@nwscc.edu
G. Springer (8088) gspringer@nwscc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology. A student who gradu- ates in the program should be able to install and maintain all types of plant equipment.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**General Education Requirements**

**ORI 107 Student Success .............................................. 1**

**Area I: Written Composition ....................................... 6**
ENG 101 English Composition I ........................................ 3
ENG 102 English Composition II OR
ENG 130 Technical Reporting Writing OR
SPH 107 Fundamentals of Public Speaking ....................... 3

**Area II: Humanities and Fine Arts .......................... 3**
Fine Arts Elective: Choose one from among: ....................... 3
ART 100 Art Appreciation
MUS 101 Music Appreciation
PHL 106 Introduction to Philosophy
PHL 206 Ethics and Society
REL 100 History of World Religions
REL 151 Survey of the Old Testament
REL 152 Survey of the New Testament
SPA 101 Introductory Spanish I

**Area III: Natural Sciences and Mathematics .......... 10**
MTH 100 Intermediate College Algebra OR
MTH 103 Introduction to Technical Mathematics ............... 3
MTH 112 Precalculus Algebra OR MTH 118
MTH 18 Technical Mathematics ....................................... 3
PH 115 Technical Physics ................................................. 4

**Area IV: History, Social and Behavioral Science ... 3**
History: Choose one from among: ................................ 3
HIS 101 Western Civilization I
HIS 102 Western Civilization II
HIS 201 United States History I
HIS 202 United States History II

**Area V: Technical Concentration and Requirements .. 53**
INT 102 Industrial Maintenance Cutting/Welding ............. 2
INT 106 Elements of Industrial Mechanics ...................... 3
INT 113 Industrial Motor Control I ................................ 3
INT 117 Principles of Industrial Mechanics .................... 3
INT 118 Fundamentals of Industrial Hydraulics and Pneumatics .......................... 3
INT 120 Concepts of Direct Current ................................. 5
INT 121 Industrial Hydraulics Troubleshooting ................. 3
INT 122 Concepts of Alternating Current ......................... 5
INT 127 Principles of Industrial Pumps and Piping Systems .................................. 3
INT 130 Concepts of Digital Electronics .......................... 5
INT 134 Principles of Industrial Maintenance Welding and Metal Cutting Techniques .......................... 3
INT 158 Industrial Wiring I ........................................... 3
INT 161 Blueprint Reading for Industrial Technicians .. 3
INT 184 Introduction to Programmable Logic Controllers 3
INT 206 Industrial Motors I ........................................... 3
INT 280C Special Topics in Industrial Maintenance Technology .................................. 3

**General Education Core............................................... 23**
**Total Major Requirements ......................................... 53**
**Total Semester Credit Hours ...................................... 76**

Northwest-Shoals Community College 2015-2016
**Industrial Systems Technology** 470303  IM

**Associate in Applied Science Degree**

**Injection Molding Technology Option**

Available: Shoals Campus

Advisors: G. Springer (8088) gspringer@nwsc.edu

This degree is designed to offer students entry level skills in the field of Plastic Injection Molding. A student who graduates should be able to operate and maintain all types of plastic injection equipment.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**General Education Requirements**  
**Semester Hours**  
**ORI 107 Student Success** ........................................ 1

**Area I: Written Composition** ........................................ 6  
ENG 101 English Composition I .................................. 3  
ENG 102 English Composition II OR  
ENG 130 Technical Reporting Writing OR SPH 107  
Fundamentals of Public Speaking.................................. 3

**Area II: Humanities and Fine Arts** ................................ 3  
Fine Arts Elective: Choose one from among:..................... 3  
ART 100 Art Appreciation  
MUS 101 Music Appreciation  
PHL 106 Introduction to Philosophy  
PHL 206 Ethics and Society  
REL 100 History of World Religions  
REL 151 Survey of the Old Testament  
REL 152 Survey of the New Testament  
SPA 101 Introductory Spanish I

**Area III: Natural Sciences and Mathematics** ................ 10  
MTH 100 Intermediate College Algebra OR  
MTH 103 Introduction to Technical Mathematics............... 3  
MTH 112 Precalculus Algebra OR MTH 118  
Technical Mathematics ............................................. 3  
PHY 115 Technical Physics .......................................... 4

**Area IV: History, Social and Behavioral Science** .......... 3  
History: Choose one from among:.............................. 3  
HIS 101 Western Civilization I  
HIS 102 Western Civilization II  
HIS 201 United States History I  
HIS 202 United States History II  

**Area V: Technical Concentration and Requirements** ........ 54  
INT 106 Elements of Industrial Mechanics .................. 3  
INT 113 Industrial Motor Control I ............................ 3  
INT 117 Principles of Industrial Mechanics .................. 3  
INT 118 Fundamentals of Industrial Hydraulics  
and Pneumatics..................................................... 3  
INT 120 Concepts of Direct Current............................ 5  
INT 122 Concepts of Alternating Current.................... 5  
INT 130 Concepts of Digital Electronics.................... 5  
INT 139 Introduction to Robotic Programming............ 3  
INT 184 Introduction to Programmable  
Logic Controllers .................................................. 3  
INT 284 Advanced Programmable Logic Controllers .... 3  
INT 291 Cooperative Education .................................. 3  
MSP 173 Injection Mold Setter Skills ........................ 3  
MSP 175 Injection Mold Setter Skills Lab.................. 3  
MSP 273 Injection Mold Processing........................... 3  
MSP 275 Injection Mold Processing Lab................... 3  
DDT 233 Solids Modeling......................................... 3

**General Education Core** ........................................... 23  
**Technical Concentration** ........................................ 54  
**Total Semester Credit Hours** ...................................... 77

**Injection Molding Technology** 470303 IM

**Short-Term Career Certificate**

Available: Shoals Campus

Advisors: G. Springer (8088) gspringer@nwsc.edu

The Plastic Injection Molding program is designed to give students entry-level skills to be employed in the field of plant maintenance. In today’s industry plant maintenance requires multi-skilled workers.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Credit Hours** ............................................. 25

<table>
<thead>
<tr>
<th>Course</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDT 233</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>INT 118</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>INT 139</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>INT 184</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MSP 173</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<tr>
<td>MSP 175</td>
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</tr>
<tr>
<td>MSP 273</td>
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<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MSP 275</td>
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<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Northwest-Shoals Community College  2015-2016
**Industrial Systems Technology 470303 IMC**

**Career Certificate**

**Mechanical Certificate**

Available: Shoals Campus  
Advisors: S. Harrison (5250) sam@nwscc.edu  
G. Springer (8088) gspringer@nwscc.edu

This certificate is designed to offer students entry level skills in the field of Industrial Systems Technology. A student who graduates in the program should be able to install and maintain all types of plant equipment.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103 Introduction to Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>INT 102 Industrial Maintenance Cutting/Welding</td>
<td>2</td>
</tr>
<tr>
<td>INT 106 Elements of Industrial Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>INT 113 Industrial Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>INT 117 Principles of Industrial Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>INT 118 Fundamentals of Industrial Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>INT 120 Concepts of Direct Current</td>
<td>5</td>
</tr>
<tr>
<td>INT 121 Industrial Hydraulics Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>INT 122 Concepts of Alternating Current</td>
<td>5</td>
</tr>
<tr>
<td>INT 127 Principles of Industrial Pumps and Piping Systems</td>
<td>3</td>
</tr>
<tr>
<td>INT 130 Concepts of Digital Electronics</td>
<td>5</td>
</tr>
<tr>
<td>INT 134 Principles of Industrial Maintenance Welding and Metal Cutting Techniques</td>
<td>5</td>
</tr>
<tr>
<td>INT 158 Industrial Wiring</td>
<td>3</td>
</tr>
<tr>
<td>INT 161 Blueprint Reading for Industrial Technicians</td>
<td>3</td>
</tr>
<tr>
<td>INT 184 Introduction to Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>INT 206 Industrial Motors</td>
<td>3</td>
</tr>
<tr>
<td>INT 280 Special Topics in Industrial Maintenance Tech</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** ........................................... 60

**Medical Assisting Technology 510801 MAT**

**Associate in Applied Science Degree**

Available Shoals Campus  
Advisors: D. South (5211) dsouth@nwscc.edu  
M. Peebles (8074) mpeebles@nwscc.edu  
J. James (5465) jojames@nwscc.edu

**General Information**

Medical Assistants are multi-skilled health professionals specifically educated to work in ambulatory settings performing administrative and clinical duties. The profession of medical assisting directly influences the public’s health and well-being, and requires mastery of a complex body of knowledge and specialized skills, formal education and practical experience that serve as standards for entry into the profession.

**Program Description**

The Medical Assisting curriculum covers administrative duties such as scheduling and receiving patients, preparing and maintaining medical records, performing secretarial duties, serving as a liaison between the physician and other individuals, and managing practice finances. Clinical duties include preparing the patient for examination, taking patient histories and vital signs, performing first aid and CPR, assisting the physician with examinations and treatments, performing routine laboratory procedures and diagnostic tests, preparing and administer ing medications as directed by the physician and performing electrocardiograms.

Graduates will be able to sit for the Registered Medical Assistant Examination administered by the American Medical Technologists. After successful completion of the exam, the individual will be a Registered Medical Assistant.

**Goals and Objectives:**

1. To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
2. To prepare the student to work in a physician’s office or medical clinic where they can successfully utilize administrative and clinical skills and techniques.
3. To teach the student to be professional at all times.

**Industrial Systems Technology 470303 INS**

**Short-Term Certificate**

Available: Shoals Campus  
Advisors: S. Harrison (5250) sam@nwscc.edu  
G. Springer (8088) gspringer@nwscc.edu

The Industrial Mechanics program is designated to give students entry-level skills to be employed in the field of plant maintenance. In today’s industry plant maintenance requires multi-skilled workers. The classes are both theory and lab-based in order to produce a well-rounded mechanic.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Theory</th>
<th>Lab</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT 106 Elements of Industrial Mechanics or MSP 136 Machine Repair</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>INT 117 Principles of Industrial Mechanics or MSP 135 Millwright</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>INT 134 Principles of Industrial Maintenance Welding and Metal Cutting Techniques or WDT 157 Consumable Welding Processes</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>INT 102 Industrial Maintenance Cutting/Welding or WDT 158 Consumable Welding Processes</td>
<td>1</td>
<td>3</td>
<td>2</td>
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<tr>
<td>MTH 103 Intro to Technical Math</td>
<td>3</td>
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<tr>
<td>INT 118 Fundamentals of Industrial Hydraulics and Pneumatics</td>
<td>2</td>
<td>3</td>
<td>3</td>
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<tr>
<td>INT 121 Industrial Hydraulics Troubleshooting</td>
<td>1</td>
<td>6</td>
<td>3</td>
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<tr>
<td>INT 127 Principles of Industrial Pumps and Piping Systems</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>INT 161 Blueprint Reading for Industrial Technicians</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
4. To teach the student in a manner that is applicable to “practical” work situations and encourages the development of critical thinking skills.

5. To teach the student appropriate knowledge and attitudes concerning the legal and ethical responsibilities of the profession.

6. To teach the student how to function as a valuable member of the health care team.

7. To encourage all students to sit for a nationally recognized credential such as the RMA.

8. To encourage continuing education so the student will be aware of continuous changes in the health care field.

The Medical Assisting Program offers some online and on campus courses. Laboratory/Clinical sections of all MAT classes must be completed on campus, or at the clinical site. Laboratory section assignments will be made based on space availability and may be day or evening.

Students will indicate on the program application the option that they would like to choose: Medical Assisting Associate degree plan, Medical Billing & Coding Certificate, or Phlebotomy Certificate.

Admission Requirements
Applicants Must:
1. Meet all the general admission requirements of NW-SCC.
2. Submit a NW-SCC application to the Admissions Office.
3. Submit a program application to the Administrative Assistant to Medical Assisting Technology Department in Building 110 (by announced department deadline).
4. Possess a minimum of 2.0 cumulative GPA on a 4.0 scale.
5. Must be eligible to take English 101 (English Composition I) and at least Math 116 (Technical Math).
6. Possess Essential Functions required for Medical Assisting Program (See Essential Functions).

Selection and Notification
1. The Medical Assisting Program admits each fall semester; admission for spring semester is based on availability in classes.
2. Students are selected on the basis of completion of all program requirements prior to deadline. If the number of qualified applications exceeds the number of spaces available in the Medical Assisting Program, the cumulative college GPA or the ACT or Compass score will be used to rank applicants for admission.
3. Program applications will be reviewed for completion of program admission requirements. Written notification of the outcome of each application will be mailed to the student at the address provided on the application.
4. Students selected must respond, confirming acceptance within ten (10) days of the postmarked date of the acceptance letter and declare MAT as their program major. A student who fails to respond to their acceptance letter, and or fails to declare MAT as their major, will forfeit his/her place in the class. A signed consent to drug testing must accompany the acceptance confirmation. If the student has a felony conviction or has pled guilty to a felony or has any drug or alcohol offense on the required background check completed the first semester of the program, he or she will be dismissed from the program.
5. Students selected for acceptance must attend the mandatory orientation session. Failure to do so may result in forfeiture of their space in the class.

Program Expectations
Students admitted into the Medical Assisting Program are expected to comply with all program competencies of the Medical Assisting Program.

Required competencies:
1. Administrative competencies: perform clerical functions, perform bookkeeping procedures, process insurance claims.
2. Clinical competencies: fundamental procedures, specimen collection, diagnostic testing, patient care.

Upon Admission
1. Medical Assisting students are required to submit physical examination and essential function forms, including proof of Hepatitis B and other vaccinations, as well as a two part TB skin test unless student receives yearly TB skin test. The physical and vaccinations required will be the student’s expense.
2. Students are required to submit proof of current CPR certification before they are allowed in clinical facilities. Only CPR courses that provide certification through the American Heart Association will be accepted.
3. Accident and liability insurance, available through the College, is required of all Medical Assisting students. The cost of the insurance will be added as a course fee to one of the medical assisting courses.
4. Medical Assisting students are required to undergo Background Screening and Drug Testing completed through the program. The cost of the drug screen will be added as a course fee to one of the medical assisting courses. The cost of the Background Screening will be the student’s responsibility. Drug Screens and Background Screening will be administered as directed by Medical Assisting Department.

Progression
1. Students must maintain a grade of “C” or better in all major required courses.
2. Math must be completed prior to taking MAT 216, Pharmacology for the Medical Office.
3. The student will be allowed to repeat up to two courses with a grade lower than a “C”, providing their cumulative GPA does not fall below 2.0.
4. Students must be accepted by clinical agencies for all clinical experiences. Must complete 225 unpaid clinical hours during the last semester in the Medical Assisting program in facility assigned by Medical Assisting Department (hours completed Monday – Friday according to facility hours, can not guarantee night and weekend hours).
5. Students must earn a passing evaluation on all clinical skills.
6. Must maintain current CPR.
7. Maintain ability to meet essential functions for medical assisting with or without reasonable accommodations.
8. Maintain an adequate level of health including freedom from chemical dependency and/or mental disorder.
Readmission to Program
Students who withdraw, or are dismissed from the program, must apply for re-admission. Students will be readmitted one time only.

Work Experience
College credit is not awarded for work experience in the healthcare field.

THE MEDICAL ASSISTING TECHNOLOGY PROGRAM ESSENTIAL FUNCTIONS
The Alabama Community College System endorses the American with Disabilities Act. In accordance with College policy, when requested, reasonable accommodations may be provided for individuals with disabilities.

Physical, cognitive, psychomotor, affective and social abilities are required in unique combinations to provide safe and effective medical care for patients. The applicant/student must be able to meet the essential functions with or without reasonable accommodations throughout the program of learning. Admission, progression, and graduation are contingent upon one’s ability to demonstrate the essential functions delineated for the Medical Assisting Technology program with or without reasonable accommodations. The Medical Assisting Technology program and/or its affiliated clinical sites may identify additional essential functions. The Medical Assisting Technology program reserves the right to amend the essential functions as deemed necessary.
In order to be admitted and progress in the Medical Assisting Technology program, one must possess a functional level of ability to perform the duties required of a medical assistant. Admission or progression may be denied if a student is unable to demonstrate the essential functions with or without reasonable accommodations.
Any reasonable accommodations made will be determined and applied to the respective Medical Assisting Technology program and may vary from reasonable accommodations made by healthcare employers.
The essential functions delineated below are necessary for the Medical Assisting program admission, progression, and graduation and for the provision of safe and effective medical care. The essential functions include but are not limited to:

1) Sensory Perception
   a) Visual
      i) Observe and discern subtle changes in physical conditions and the environment
      ii) Visualize different color spectrums and color changes
      iii) Read fine print in varying levels of light
      iv) Read for prolonged periods of time
      v) Read cursive writing
      vi) Read at varying distances
      vii) Read data/information displayed on monitors/equipment
   b) Auditory
      i) Interpret monitoring devices
      ii) Distinguish muffled sounds heard through a stethoscope
      iii) Hear and discriminate high and low frequency sounds produced by the body and the environment
      iv) Effectively hear to communicate with others
   c) Tactile
      i) Discern tremors, vibrations, pulses, textures, temperature, shapes, size, location and other physical characteristics
   d) Olfactory
      i) Detect body odors and odors in the environment

2) Communication/Interpersonal Relationships
   a) Verbally and in writing, engage in a two-way communication and interact effectively with others, from a variety of social, emotional, cultural and intellectual backgrounds
   b) Work effectively in groups
   c) Work effectively by one’s self
   d) Discern and interpret nonverbal communication
   e) Express one’s ideas and feelings clearly
   f) Communicate with others accurately in a timely manner
   g) Obtain communications from a computer

3) Cognitive/Critical Thinking
   a) Effectively read, write and comprehend the English language
   b) Consistently and dependably engage in the process of critical thinking in order to formulate and implement safe and ethical medical decisions in a variety of health care settings
   c) Demonstrate satisfactory performance on written examinations including mathematical computations without a calculator
   d) Satisfactorily achieve the program objectives

4) Motor Function
   a) Handle small delicate equipment/objects without extraneous movement, contamination or destruction
   b) Move, position, turn, transfer, assist with lifting or lifting and carry clients without injury to clients, self or others
   c) Maintain balance from any position
   d) Stand on both legs
   e) Coordinate hand/eye movements
   f) Push/pull heavy objects without injury to client, self or others
   g) Stand, bend, walk and/or sit for 6-12 hours in a clinical setting performing physical activities requiring energy without jeopardizing the safety of the client, self or others
   h) Walk without a cane, walker or crutches
   i) Function with hands free for medical care and transporting items
   j) Transport self and client without the use of electrical devices
   k) Flex, abduct and rotate all joints freely
   l) Respond rapidly to emergency situations
   m) Maneuver in small areas
   n) Perform daily care functions for the client
   o) Coordinate fine and gross motor hand movements to provide safe effective medical care
   p) Calibrate/use equipment
   q) Execute movement required to provide medical care in all health care settings
   r) Perform CPR and physical assessment
   s) Operate a computer

5) Professional Behavior
   a) Convey caring, respect, sensitivity, tact, compassion, empathy, tolerance and a healthy attitude toward others
   b) Demonstrate a healthy mental attitude that is age appropriate in relationship to the client
   c) Handle multiple tasks concurrently
   d) Perform safe, effective medical care for clients in a caring context
   e) Understand and follow the policies and procedures of
the College and clinical agencies
f) Understand the consequences of violating the student code of conduct

g) Understand that posing a direct threat to others is unacceptable and subjects one to discipline

h) Refrain from posing a threat to self or others

i) Function effectively in situations of uncertainty and stress inherent in providing medical care

j) Adapt to changing environments and situations

k) Remain free of chemical dependency

l) Report promptly to clinicians and remain as assigned at the clinical site.

m) Provide medical care in an appropriate time frame

n) Accept responsibility, accountability, and ownership of one’s actions

o) Seek supervision/consultation in a timely manner

p) Examine and modify one’s own behavior when it interferes with medical care or learning

Upon admission, an individual who discloses a disability can request reasonable accommodations. Individuals will be asked to provide documentation of the disability in order to assist with the provision of appropriate reasonable accommodations. The respective College will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program or provide accommodations that inflict an undue burden on the respective College. In order to be admitted one must be able to perform all of the essential functions with or without accommodations. If an individual’s health changes during the program of learning, so that the essential functions cannot be met with or without reasonable accommodations, the student will be withdrawn from the Medical Assisting Technology program. The Medical Assisting faculty reserves the right at any time to require additional medical examination at the student’s expense in order to assist with the evaluation of the student’s ability to perform the essential functions. Requests for reasonable accommodations should be directed to: ADA Coordinator, Crystal Ingle at 256-331-5249 or cingle@nwscc.edu

**Medical Assisting Technology**  
510801 MAT  
Associate in Applied Science Degree

Available: Shoals Campus  
D. South (5211) dsouth@nwscc.edu  
M. Peebles (8074) mpeebles@nwscc.edu  
J. James (5465) jjames@nwscc.edu

This degree is designed to prepare students to assist the physician in providing patient care in physician’s offices, minor emergency centers, long-term care facilities, and other types of freestanding medical clinics. Medical assistants are also prepared to assume administrative roles in physician’s offices, including dealing with billing protocols, coding mechanisms, and office transcription.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>ORI 107</th>
<th>Student Success</th>
<th>Area I: Written Composition</th>
<th>Area II: Humanities and Fine Arts</th>
<th>Area III</th>
<th>Natural Sciences and Mathematics</th>
<th>Area IV</th>
<th>History, Social and Behavioral Science</th>
<th>Area V</th>
<th>Technical Concentration &amp; Requirements</th>
<th>SPH 107</th>
<th>Fundamentals of Public Speaking</th>
<th>Humanities and Fine Arts Elective: Choose one from among:</th>
</tr>
</thead>
</table>

SPH 107 Fundamentals of Public Speaking 3

Humanities and Fine Arts Elective: Choose one from among:

- ENG 251 American Literature I
- ENG 252 American Literature II
- ENG 261 English Literature I
- ENG 262 English Literature II
- ART 100 Art Appreciation
- MUS 101 Music Appreciation
- PHIL 106 Introduction to Philosophy
- PHIL 206 Ethics and Society
- REL 100 History of World Religions
- REL 151 Survey of the Old Testament
- REL 152 Survey of the New Testament
- SPA 101 Introductory Spanish

**Area III: Natural Sciences and Mathematics** 7

- MTH 116 Mathematical Applications 3
- BIO 103 Principles of Biology I 4

**Area IV: History, Social and Behavioral Science** 3

- PSY 200 General Psychology 3

**Area V: Technical Concentration & Requirements** 49

- CIS 146 Microcomputer Applications 3
- MAT 101 or OAD 211 Medical Terminology 3
- MAT 102 Medical Assisting Theory I 3
- MAT 103 Medical Assisting Theory II 3
- MAT 111 Clinical Procedures I for the Medical Patient 3
- MAT 120 Medical Administrative Procedures I or OAD 214 Medical Office Procedures 3
- MAT 121 Medical Administrative Procedures II 3
- MAT 125 Laboratory Procedures I 3
- MAT 128 Medical Law and Ethics 3
- MAT 200 Management of Office Emergencies 2
- MAT 211 Clinical Procedures II for the Medical Assistant 3
- MAT 215 Laboratory Procedures II 3
- MAT 216 Medical Pharmacology for the Medical Office 4
- MAT 220 Medical Office Insurance 3
- MAT 228 Medical Assistant Review Course 1
- MAT 229 Medical Assisting Preceptorship 3
- OAD 212 Medical Transcription or HIT 230 Medical Coding 3
- EMS 100 Cardiopulmonary Resuscitation I 1

**General Education Core** 19-20

**Technical Concentration** 50

**Total Semester Credit Hours** 69-70

**Phlebotomy Option** 510801 PBY  
**Short-Term Certificate**

Available: Shoals Campus  
M. Peebles (8074) mpeebles@nwscc.edu  
D. South (5211) dsouth@nwscc.edu  
J. James (5465) jjames@nwscc.edu

The College offers a 13-hour short-term certificate in phlebotomy, which prepares the student for work in acute care settings such as major hospital laboratories, minor emergency centers, and freestanding laboratories, working under the supervision of medical laboratory technologists or laboratory managers. The
course will provide both classroom and clinical experiences. Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

### Medical Billing and Coding Option

#### Short-Term Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 101 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>OAD 211 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MAT 125 Laboratory Procedures I</td>
<td>2</td>
</tr>
<tr>
<td>MAT 215 Laboratory Procedures II</td>
<td>2</td>
</tr>
<tr>
<td>MAT 239 Phlebotomy Preceptorship</td>
<td>1</td>
</tr>
<tr>
<td>EMS 100 Cardiopulmonary Resuscitation</td>
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</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Office Administration

#### Associate in Applied Science Degree

This degree is designed for students who wish to seek employment upon completing the prescribed curriculum. However, many of these courses may be used in transfer to four-year institutions with business programs.

#### Accounting Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 101 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>OAD 211 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MAT 125 Laboratory Procedures I</td>
<td>2</td>
</tr>
<tr>
<td>MAT 215 Laboratory Procedures II</td>
<td>2</td>
</tr>
<tr>
<td>MAT 239 Phlebotomy Preceptorship</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong></td>
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</tr>
</tbody>
</table>

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

### General Education Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORI 107 Student Success</td>
<td></td>
</tr>
<tr>
<td><strong>Area I: Written Composition</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td><strong>ENG 101 English Composition I</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>ENG 102 English Composition II</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Area II: Humanities and Fine Arts</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>Humanities or Fine Arts Elective:</td>
<td></td>
</tr>
<tr>
<td>Choose one from among:</td>
<td></td>
</tr>
<tr>
<td>ENG 251 American Literature I</td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>ENG 252 American Literature II</td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>ENG 261 English Literature I</td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>ENG 262 English Literature II</td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>ART 100 Art Appreciation</td>
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<tr>
<td>MUS 101 Music Appreciation</td>
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<tr>
<td>PHL 106 Introduction to Philosophy</td>
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<td>PHL 206 Ethics and Society</td>
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<tr>
<td>REL 100 History of World Religions</td>
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<tr>
<td>REL 151 Survey of the Old Testament</td>
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<tr>
<td>REL 152 Survey of the New Testament</td>
<td></td>
</tr>
<tr>
<td>SPA 101 Introductory Spanish I</td>
<td></td>
</tr>
<tr>
<td><strong>Area III: Natural Sciences and Mathematics</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td></td>
</tr>
<tr>
<td><strong>Area IV: History, Social and Behavioral Science</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>ECO 231 Principles of Macroeconomics OR</td>
<td></td>
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<tr>
<td>ECO 232 Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td><strong>Area V: Technical Concentration and Requirements...</strong></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td>CIS 146 Microcomputer Applications</td>
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<tr>
<td>CIS 249 Microcomputer Operating Systems</td>
<td></td>
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<tr>
<td>ACT 249 Payroll Accounting</td>
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</tr>
<tr>
<td>BUS 241 OR ACT 141 Principles of Accounting I or Basic Accounting Principles</td>
<td></td>
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<tr>
<td>BUS 242 OR ACT 142 Principles of Accounting II or Advanced Accounting Principles</td>
<td></td>
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<tr>
<td>*OAD 101 Beginning Keyboarding</td>
<td></td>
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<tr>
<td>OAD 103 Intermediate Keyboarding</td>
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<tr>
<td>OAD 104 Advanced Keyboarding</td>
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<tr>
<td>OAD 125 Word Processing</td>
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<tr>
<td>OAD 126 Advanced Word Processing</td>
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<tr>
<td>OAD 130 Electronic Calculations</td>
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<tr>
<td>OAD 133 Business Communications</td>
<td></td>
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<tr>
<td>OAD 134 Career and Professional Development</td>
<td></td>
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<tr>
<td>OAD 135 Financial Record Keeping</td>
<td></td>
</tr>
<tr>
<td>OAD 138 Records/Information Management</td>
<td></td>
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<tr>
<td>OAD 217 Office Management</td>
<td></td>
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<tr>
<td>OAD 218 Office Procedures</td>
<td></td>
</tr>
<tr>
<td><strong>OAD ELECTIVE</strong> Choose three courses from among:</td>
<td></td>
</tr>
<tr>
<td>OAD 131 Business English</td>
<td></td>
</tr>
<tr>
<td>OAD 137 Computerized Financial Record Keeping</td>
<td></td>
</tr>
<tr>
<td>OAD 200 Machine Transcription</td>
<td></td>
</tr>
<tr>
<td>OAD 231 Office Applications</td>
<td></td>
</tr>
<tr>
<td>OAD 233 Trends in Office Technology</td>
<td></td>
</tr>
<tr>
<td>OAD 242 Office Internship</td>
<td></td>
</tr>
<tr>
<td>ACT 246 Microcomputer Accounting</td>
<td></td>
</tr>
<tr>
<td><strong>General Education Core</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Technical Concentration</strong></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong></td>
<td><strong>76</strong></td>
</tr>
</tbody>
</table>

*OAD 100 prerequisite required unless student has had at least one course of high school keyboarding. OAD elective may be substituted for OAD 101 if student has two years of high school keyboarding and a working knowledge of Microsoft Word or permission of instructor.
Administrative Professional Option 520401 OAP

Available: Phil Campbell and Shoals Campuses
Advisors: T. McClinton (5212) mcclinton@nwscc.edu
          D. South (5211) dsouth@nwscc.edu
          P. Peters (6326) ppeters@nwscc.edu

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements Semester Hours
ORI 107 Student Success ........................................ 1
Area I: Written Composition ..................................... 6
  **ENG 101 English Composition I ................................ 3
  ENG 102 English Composition II ................................ 3
Area II: Humanities and Fine Arts ................................. 3
  Humanities or Fine Arts Elective:
  Choose one from among: ........................................... 3
    ENG 251 American Literature I
    ENG 252 American Literature II
    ENG 261 English Literature I
    ENG 262 English Literature II
    ART 100 Art Appreciation
    MUS 101 Music Appreciation
    PHL 106 Introduction to Philosophy
    PHL 206 Ethics and Society
    REL 100 History of World Religions
    REL 151 Survey of the Old Testament
    REL 152 Survey of the New Testament
    SPA 101 Introductory Spanish I
Area III: Natural Sciences and Mathematics .................. 3
  MTH 116 Mathematical Applications ............................ 3
Area IV: History, Social and Behavioral Science .............. 3
  ECO 231 Principles of Macroeconomics OR
  ECO 232 Principles of Microeconomics ........................ 3
Area V: Technical Concentration and Requirements 60
  CIS 146 Microcomputer Applications ........................... 3
  CIS 249 Microcomputer Operating Systems .................... 3
  *OAD 101 Beginning Keyboarding ................................ 3
  OAD 103 Intermediate Keyboarding ............................ 3
  OAD 104 Advanced Keyboarding ................................ 3
  OAD 125 Word Processing ....................................... 3
  OAD 126 Advanced Word Processing ............................ 3
  OAD 130 Electronic Calculations ................................ 3
  OAD 131 Business English ....................................... 3
  OAD 133 Business Communications ............................. 3
  OAD 134 Career and Professional Development ............... 3
  OAD 135 Financial Record Keeping ............................ 3
  OAD 138 Records/Information Management .................... 3
  OAD 217 Office Management .................................... 3
  OAD 218 Office Procedures ..................................... 3
  OAD ELECTIVE: Choose five courses from among: 15
    OAD 110 Computer Navigation
    OAD 200 Machine Transcription
    OAD 202 Legal Transcription
    OAD 203 Legal Office Procedures
    OAD 211 Medical Terminology
    OAD 212 Medical Transcription
    OAD 214 Medical Office Procedures
    OAD 215 Health Information Management
    OAD 231 Office Applications
    OAD 233 Trends in Office Technology
    OAD 242 Office Internship
    BUS 263 The Legal and Social Environment of Business

General Education Core ......................................... 16
Technical Concentration ......................................... 60
Total Semester Credit Hours ................................. 76

*OAD 100 prerequisite required unless student has had at least one course of high school keyboarding. OAD elective may be substituted for OAD 101 if student has two years of high school keyboarding and a working knowledge of Microsoft Word or permission of instructor.

**Keyboarding skills are essential for the successful completion of English 101.

Clerical Option 520401 OCO

Available: Phil Campbell and Shoals Campuses
Advisors: T. McClinton (5212) mcclinton@nwscc.edu
          D. South (5211) dsouth@nwscc.edu
          P. Peters (6326) ppeters@nwscc.edu

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements Semester Hours
ORI 107 Student Success ........................................ 1
Area I: Written Composition ..................................... 6
  **ENG 101 English Composition I ................................ 3
  ENG 102 English Composition II ................................ 3
Area II: Humanities and Fine Arts ................................. 3
  Humanities or Fine Arts Elective:
  Choose one from among: ........................................... 3
    ENG 251 American Literature I
    ENG 252 American Literature II
    ENG 261 English Literature I
    ENG 262 English Literature II
    ART 100 Art Appreciation
    MUS 101 Music Appreciation
    PHL 106 Introduction to Philosophy
    PHL 206 Ethics and Society
    REL 100 History of World Religions
    REL 151 Survey of the Old Testament
    REL 152 Survey of the New Testament
    SPA 101 Introductory Spanish I
Area III: Natural Sciences and Mathematics .................. 3
  MTH 116 Mathematical Applications ............................ 3
Area IV: History, Social and Behavioral Science .............. 3
  ECO 231 Principles of Macroeconomics OR
  ECO 232 Principles of Microeconomics ........................ 3
Area V: Technical Concentration and Requirements 51
  CIS 146 Microcomputer Applications ........................... 3
  CIS 249 Microcomputer Operating Systems .................... 3
  *OAD 101 Beginning Keyboarding ................................ 3
  OAD 103 Intermediate Keyboarding ............................ 3
  OAD 104 Advanced Keyboarding ................................ 3
  OAD 125 Word Processing ....................................... 3
  OAD 126 Advanced Word Processing ............................ 3
  OAD 130 Electronic Calculations ................................ 3
  OAD 131 Business English ....................................... 3
  OAD 133 Business Communications ............................. 3
  OAD 134 Career and Professional Development ............... 3
  OAD 137 Transcription
  OAD 217 Office Management .................................... 3
  OAD 218 Office Procedures ..................................... 3
  OAD ELECTIVE: Choose five courses from among: 15
    OAD 110 Computer Navigation
    OAD 200 Machine Transcription
    OAD 202 Legal Transcription
    OAD 203 Legal Office Procedures
    OAD 211 Medical Terminology
    OAD 212 Medical Transcription
    OAD 214 Medical Office Procedures
    OAD 215 Health Information Management
    OAD 231 Office Applications
    OAD 233 Trends in Office Technology
    OAD 242 Office Internship
    BUS 263 The Legal and Social Environment of Business

General Education Core ......................................... 16
Technical Concentration ......................................... 51
Total Semester Credit Hours ................................. 68

*OAD 100 prerequisite required unless student has had at least one course of high school keyboarding. OAD elective may be substituted for OAD 101 if student has two years of high school keyboarding and a working knowledge of Microsoft Word or permission of instructor.

**Keyboarding skills are essential for the successful completion of English 101.
OAD 135 Financial Record Keeping.........................3
OAD 138 Records/Information Management ...............3
OAD 217 Office Management ................................3
OAD 218 Office Procedures ................................3
OAD ELECTIVE Choose two courses from among:.......6
  OAD 110 Computer Navigation
  OAD 200 Machine Transcription
  OAD 215 Health Information Management
  OAD 231 Office Applications
  OAD 233 Trends in Office Technology
  OAD 242 Office Internship

**OAD 100 prerequisite required unless student has had at
least one course of high school keyboarding. OAD elective
may be substituted for OAD 101 if student has two years of
high school keyboarding and a working knowledge of Microsoft
Word or permission of instructor.

**Keyboarding skills are essential for the successful completion
of English 101.

Office Administration

OAD 520401 Office Administration

Career Certificate

Available: Phil Campbell and Shoals Campuses

Advisors: T. McClinton (5212)  mclinton@nwscc.edu
         D. South (5211)  dsouth@nwscc.edu
         P. Peters (6326)  ppeters@nwscc.edu

This certificate is designed to teach students the skills
necessary to acquire and maintain secretarial and clerical
positions in the business community. A high school diploma
or GED certificate for admission is required.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

General Education Requirements  Semester Hours

**ENG 101 English Composition I ..........................3
MTH 116 Mathematical Applications ........................3
Total General Education Requirements ....................6

Major Requirements

*OAD 101 Beginning Keyboarding .........................3
OAD 103 Intermediate Keyboarding .......................3
OAD 104 Advanced Keyboarding ............................3
OAD 125 Word Processing ..................................3
OAD 126 Advanced Word Processing .......................3
OAD 130 Electronics Calculations .........................3
OAD 131 Business English ................................3
OAD 133 Business Communications .......................3
OAD 134 Career and Professional Development ..........3
OAD 135 Financial Record Keeping .......................3
OAD 138 Records/Information Management ..............3
OAD 217 Office Management ................................3
OAD 218 Office Procedures ................................3
Total Major Requirements ................................39

OAD Electives

Choose three courses from among:
OAD 110, 137, 200, 202, 203, 211, 212, 214, 215, 231,
233, 242 and BUS 263 .....................................9

Total Semester Credit Hours ...............................55

Registered Nursing

Associate in Applied Science Degree

Available: Phil Campbell Campus

Advisors: A. Bales (6298)  abales@nwscc.edu
         P. Ford (5306)  pford@nwscc.edu
         M. Hester (625)  mhester@nwscc.edu
         B. Humphres (6237)  bhumphres@nwscc.edu
         D. Jaynes (6221)  dromans@nwscc.edu
         S. Logan (6252)  logans@nwscc.edu
         M. Mays (6256)  melissam@nwscc.edu
         S. Smith (6207/5339)  shelia.smith@nwscc.edu
         J. Sorrell (6244)  jsorrell@nwscc.edu
         D. Sykes (6249)  dsykes@nwscc.edu
         C. Tice (6293)  ctice@nwscc.edu
         C. Tidwell (5306)  cindy@nwscc.edu

GENERAL INFORMATION

The Division of Health Studies offers a five-semester
Associate Degree Nursing (ADN) program. Upon satisfactory
completion, the Associate of Applied Science Degree is
defined, and the graduate is eligible to apply to take the
National Council Licensure Examination (NCLEX-RN) for
licensure as a Registered Nurse. Graduation from the program
however, does not guarantee Board of Nursing approval to
take the NCLEX-RN licensing examination. See Standards
of Conduct section.

The Associate Degree Nursing Program supports the
Philosophy and Purpose of the College and serves its
community by preparing associate degree nurses for a
beginning level of practice in varied health settings. The Nursing
Program Director and the nursing faculty have the responsibility
for administering and evaluating the Associate Degree Nursing
Program according to policies and guidelines established by the
College and the Alabama Board of Nursing.

The Purpose of the Associate Degree Nursing Program is to:

1. Prepare entry level Registered Nurses who utilize the
   nursing process to deliver safe, competent care to clients
   of all ages who have common health problems;
2. Foster learning as a life-long process to remain competent;
3. Prepare entry level Registered Nurses who contribute to
   society as citizens and members within the discipline of
   nursing;
4. Provide education at the Associate Degree level, which forms
   a basis for entry into baccalaureate nursing education.

APPROVALS AND ACCREDITATION

The Associate Degree Nursing Program is state approved by
the Alabama Board of Nursing and nationally accredited by the
Accreditation Commission for Education in Nursing (formerly
NLNAC). Each agency’s address is provided:

Alabama Board of Nursing
RSA Plaza, Ste. 850
770 Washington Ave.
Montgomery, Alabama 36104
phone: 334.242.4060, Fax: 334.242.4360
Website: http://www.abn.state.al.us

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road NE
Suite 850
Atlanta, Georgia 30326
Phone: (404) 975-5000
Fax: 404.975.5020, Website: http://www.acenursing.org

All agencies utilized for students’ clinical experiences are accredited or licensed by their governing body.

ADMISSION PROCEDURES AND REQUIREMENTS

A generic option and a mobility option are offered. The generic option is for students without previous nursing education. Students are admitted in the fall semester and complete five semesters of nursing.

The mobility option is for Licensed Practical Nurses who graduated from a state-approved school of practical nursing and hold a current, active, and unencumbered Alabama Practical Nursing license. This license must be maintained throughout the program. Proof of licensure must be on file.

NOTICE: The Alabama Community College System Standardized Curriculum is continuing to be reviewed and analyzed. Modifications will be made as needed.

The admission criteria is currently under review and is subject to change.

GENERIC OPTION

Minimum admission standards for the Associate Degree Nursing Program include:

1. Unconditional admission to the College;
2. Good standing with the College;
3. Receipt of completed application for the Associate Degree Nursing Program by April 15th for fall admission annually;
4. Minimum of 2.50 cumulative grade point average based on the most recent 24 credit hours of college work completed and on academic status;
5. Eligible for English 101 (English Composition I) and MTH 100 (Intermediate College Algebra) or higher level as determined by college policy, and satisfaction of college reading requirement;
6. Completion of the TEASV with official scores on file in the NW-SCC nursing office by application deadline. Test must have been completed within the last three years prior to the application deadline;
7. Essential functions required for nursing are met. (See Essential Functions)

Admission to the Associate Degree Nursing Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available.

Meeting minimal requirements does not guarantee acceptance.

The Associate Degree Nursing Program is developed as a combined sequence of nursing and general education courses.

The general education courses are offered on both the Shoals and Phil Campbell campuses. The general education courses can be taken before or during the program but taken no later than the semester specified in the curriculum plan. If a student has major responsibilities such as family or work; has been away from school for several years; or does not have a strong academic record, taking the general education courses prior to entry is recommended. Successful completion of science and other courses prior to application may result in higher ranking score and improve the chance of being admitted. Prior credit for general education courses does not shorten the length of the nursing curriculum due to sequencing of the nursing courses.

THE ALABAMA COMMUNITY COLLEGE SYSTEM NURSING PROGRAM ESSENTIAL FUNCTIONS

The Alabama Community College System endorses the Americans with Disabilities Act. In accordance with College policy, when requested, reasonable accommodations may be provided for individuals with disabilities.

Physical, cognitive, psychomotor, affective, and social abilities are required in unique combinations to provide safe and effective nursing care. The applicant/student must be able to meet the essential functions with or without reasonable accommodations throughout the program of learning. Admission, progression, and graduation are contingent upon one’s ability to demonstrate the essential functions delineated for the nursing programs with or without reasonable accommodations. The nursing programs and/or its affiliated clinical agencies may identify additional essential functions. The nursing programs reserve the right to amend the essential functions as deemed necessary.

In order to be admitted and to progress in the nursing program one must possess a functional level of ability to perform the duties required of a nurse. Admission or progression may be denied if a student is unable to demonstrate the essential functions with or without reasonable accommodations.

The essential functions delineated are those deemed necessary by the Alabama Community College System nursing programs. No representation regarding industrial standards is implied. Similarly, any reasonable accommodations made will be determined and applied to the respective nursing program and may vary from reasonable accommodations made by healthcare employers.

The essential functions delineated below are necessary for nursing program admission, progression and graduation and for the provision of safe and effective nursing care. The essential functions include but are not limited to the ability to:

1. Sensory Perception
   a) Visual
      i) Observe and discern subtle changes in physical conditions and the environment
      ii) Visualize different color spectrums and color changes
      iii) Read fine print in varying levels of light
      iv) Read for prolonged periods of time
      v) Read cursive writing
   b) Auditory
      i) Interpret monitoring devices
ii) Distinguish muffled sounds heard through a stethoscope
iii) Hear and discriminate high and low frequency sounds produced by the body and the environment
iv) Effectively hear to communicate with others
c) Tactile
i) Discern tremors, vibrations, pulses, textures, temperature, shapes, size, location and other physical characteristics
d) Olfactory
i) Detect body odors and odors in the environment

2. Communication/ Interpersonal Relationships
a) Verbally and in writing, engage in a two-way communication and interact effectively with others, from a variety of social, emotional, cultural and intellectual backgrounds
b) Work effectively in groups
c) Work effectively independently
d) Discern and interpret nonverbal communication
e) Express one’s ideas and feelings clearly
f) Communicate with others accurately in a timely manner
g) Obtain communications from a computer

3. Cognitive/Critical Thinking
a) Effectively read, write and comprehend the English language
b) Consistently and dependably engage in the process of critical thinking in order to formulate and implement safe and ethical nursing decisions in a variety of health care settings
c) Demonstrate satisfactory performance on written examinations including mathematical computations without a calculator
d) Satisfactorily achieve the program objectives

4. Motor Function
a) Handle small delicate equipment/objects without extraneous movement, contamination or destruction
b) Move, position, turn, transfer, assist with lifting or lift and carry clients without injury to clients, self or others
c) Maintain balance from any position
d) Stand on both legs
e) Coordinate hand/eye movements
f) Push/pull heavy objects without injury to client, self or others
g) Stand, bend, walk and/or sit for 6-12 hours in a clinical setting performing physical activities requiring energy without jeopardizing the safety of the client, self or others
h) Walk without a cane, walker or crutches
i) Function with hands free for nursing care and transporting items
j) Transport self and client without the use of electrical devices
k) Flex, abduct and rotate all joints freely
l) Respond rapidly to emergency situations
m) Maneuver in small areas
n) Perform daily care functions for the client
o) Coordinate fine and gross motor hand movements to provide safe effective nursing care
p) Calibrate/use equipment
q) Execute movement required to provide nursing care in all health care settings
r) Perform CPR and physical assessment
s) Operate a computer

5. Professional Behavior
a) Convey caring, respect, sensitivity, tact, compassion, empathy, tolerance and a healthy attitude toward others
b) Demonstrate a mentally healthy attitude that is age appropriate in relationship to the client
c) Handle multiple tasks concurrently
d) Perform safe, effective nursing care for clients in a caring context
e) Understand and follow the policies and procedures of the College and clinical agencies
f) Understand the consequences of violating the student code of conduct
g) Understand that posing a direct threat to others is unacceptable and subjects one to discipline
h) Meet qualifications for licensure by examination as stipulated by the Alabama Board of Nursing
i) Not to pose a threat to self or others
j) Function effectively in situations of uncertainty and stress inherent in providing nursing care
k) Adapt to changing environments and situations
l) Remain free of chemical dependency
m) Report promptly to clinicals and remain for 6-12 hours on the clinical unit
n) Provide nursing care in an appropriate time frame
o) Accepts responsibility, accountability, and ownership of one’s actions
p) Seek supervision/consultation in a timely manner
q) Examine and modify one’s own behavior when it interferes with nursing care or learning

Upon admission, an individual who discloses a disability can request reasonable accommodations. Individuals will be asked to provide documentation of the disability in order to assist with the provision of appropriate reasonable accommodations. The respective College will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program or provide accommodations that inflict an undue burden on the respective College. In order to be admitted one must be able to perform all of the essential functions with or without reasonable accommodations. If an individual’s health changes during the program of learning, so that the essential functions cannot be met with or without reasonable accommodations, the student will be withdrawn from the nursing program. The nursing faculty reserves the right at any time to require an additional medical examination at the student’s expense in order to assist with the evaluation of the student’s ability to perform the essential functions. Requests for reasonable accommodations should be directed to: ADA Coordinator, Crystal Ingle, at 256.331.5249 or cingle@nwsccc.edu

MOBILITY OPTION
In addition to the general admission requirements, students applying to the mobility option must:

1. Have completed BIO 201, BIO 202, ENG 101 and MTH 100 (Intermediate College Algebra) or higher with a grade of "C" or higher.
2. Possess and maintain a current, active, and unencumbered Alabama LPN license. Proof must be on file.
4. Graduates of the approved Alabama Community College System PN standardized curriculum may be eligible to enter the ADN program during the third semester without taking NUR 200 if graduation occurred within the previous two years. All other Licensed Practical Nurses’ must successfully complete NUR 200.
5. MEET THE ADN APPLICATION DEADLINE: For the mobility option the deadlines are:
   - Spring Admission - October 15 (NUR 200 required)
   - Summer Admission - February 15 (NUR 200 exempted)
Admission to the Associate Degree Nursing Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. Meeting minimal requirements does not guarantee acceptance.
(Preference will be given to graduates of Northwest-Shoals Community College LPN program.)
Applicants will be notified in writing by the ADN office of acceptance into the ADN program.

TRANSFER POLICY
Students wishing to transfer must:
1. Must meet minimum admission and progression requirements for NW-SCC and the Nursing program.
2. Must possess a grade of C or better in all general education taken at another institution and possess a minimum of a 2.50 cumulative GPA or higher in the last 24 hours at the time of transfer.
3. Must be a student in good standing and eligible to return to the previous nursing program.
4. Have Dean/Director of previous nursing program provide a letter of eligibility for progression in previous nursing program.
5. Must complete the last three semesters in the ADN (RN) Program at NW-SCC.
6. Must complete the last two semesters in the PN Program at NW-SCC.
Acceptance of transfer students into nursing programs is limited by the number of faculty and clinical facilities available. Meeting minimal standards does not guarantee acceptance.
Transfer deadline for Spring Semester - October 15
Transfer deadline for Summer Semester - February 15

PROGRAM REQUIREMENTS:
After acceptance each student must:
1. Submit completed medical examination forms (at student expense) that provide evidence the student is free of communicable disease and chemical dependency, and is physically and psychologically able to participate fully in both classroom and clinical aspects of the program. The nursing faculty reserves the right to require at any time (at student expense) an additional medical examination in order to evaluate the student’s state of physical, mental, and/or emotional health such as during pregnancy, infectious diseases, interference with mobility, emotional instability, chemical dependence, etc. When an examination or treatment is required, written proof must be provided by the physician attesting to the student’s ability to carry out both classroom and clinical requirements of the program.

NOTE: Northwest-Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by a clinical agency.
2. Meet the Essential Functions with or without reasonable accommodations. Additional health criteria may be required by clinical agencies.
3. Purchase regulation uniforms and specified accessories.
4. Possess and maintain current certification in cardiopulmonary resuscitation at the health care provider level (BLS) by the American Health Association. Community CPR is not acceptable.
5. Receive certain immunizations at the student's expense.
6. Purchase professional liability insurance through the College.
7. Participate in and pay for periodic standardized tests.
8. Participate in and pay for drug testing as directed by the Nursing Department.
9. Participate in and pay for background checks as directed by the Nursing Department.

NOTICE: The Alabama Community College System Standardized Curriculum is continuing to be reviewed and analyzed. Modifications will be made as needed.

PROGRAM PROGRESSION POLICY:
In order to continue in the nursing program, the student must:
1. Complete all required general education courses according to The Alabama Community College System Nursing Education curriculum.
2. Maintain a grade of “C” or better in all required general education and nursing courses and maintain a 2.0 cumulative GPA at NW-SCC.

Please note: The Grading Scale for all Nursing Courses in the Nursing Program is:
- A = 90-100
- B = 80-89
- C = 75-79
- D = 60-74
- F = 59 and below.
3. Be accepted by clinical agencies for clinical experiences.
4. Earn a satisfactory clinical evaluation in all nursing courses with a clinical component.
5. Maintain ability to meet essential functions for nursing with or without reasonable accommodations.
7. Maintain an adequate level of health including but not limited to annual PPD, and freedom from chemical dependency and/or mental disorder.

8. Successfully complete the nursing education program:
   a) Within 48 months from initial enrollment in courses with an NUR prefix for ADN students, or
   b) Within 24 months from initial enrollment in courses with an NUR prefix for PN & LPN to RN Mobility students.

A student that has an unsuccessful attempt in a nursing course (W, D, or F) cannot progress until the course is completed successfully. Course repetition will be based on instructor availability and program resources. Withdrawal and/or a D or F in one or more nursing courses in a term is considered one unsuccessful attempt.

If a student has been unsuccessful in the associate degree nursing program, the student may apply for admission to the practical nursing program. If a student has been unsuccessful in the mobility program, the student may apply for admission to the generic program.

REINSTALLATION POLICY: (Readmission)

In order to continue in the nursing program, the student must:

1. Students whose progression through the nursing program is interrupted and who desire to be reinstated in the program must schedule an appointment with a nursing faculty advisor to discuss reinstatement. In order to be eligible for reinstatement, the following criteria must be met:
   a) Apply for readmission to the college if not currently enrolled.
   b) Submit application requesting reinstatement to the nursing program by the following deadlines:
      Fall Semester - May 15
      Spring Semester - October 15
      Summer Semester - February 15
   c) Request reinstatement within one year from the term of withdrawal or failure;
   d) Demonstrate competency in previous nursing courses. This may be evaluated by testing and/or skills validation.
   e) Adhere to nursing curriculum and/or program policies and procedures effective at the point of reinstatement.

2. Reinstatement to the nursing program is not guaranteed.

3. Reinstatement will be denied due to, but not limited to, any of the following circumstances:
   a) Grade point average is less than 2.0 from courses completed at the current institution;
   b) Refusal by a clinical agency to accept the student for clinical experiences;
   c) Twelve months have elapsed since the student was enrolled in a nursing course;
   d) Student has been dismissed from the program. Students dismissed from the previous program for disciplinary reasons and/or unsafe/unsatisfactory client care in the clinical area will not be allowed reinstatement to the nursing program.

4. A total of two unsuccessful attempts (D, F, or withdrawal) in the nursing program will result in dismissal.

5. If a student has a documented extenuating circumstance that should be considered related to a withdrawal or failure, then this student may request a hearing before the Admission Committee or other appropriate college committee for a decision on repeating a course or readmission to the program.

6. Students who have two unsuccessful attempts in any nursing program (ADN/PN/Mobility) or combination of nursing programs may apply for admission as a new student to any nursing program within the Alabama Community College System, provided:
   a) the student meets current entry requirements;
   b) the student was not dismissed from the previous program for disciplinary reasons or for unsafe/unsatisfactory client care in the clinical area.

STANDARDS OF CONDUCT:

The nursing student shall comply with the standards that determine acceptable behavior of a nurse in accordance with the Alabama Board of Nursing Administrative Code. FAILURE TO COMPLY WITH ANY OF THESE STANDARDS WHILE IN THE NURSING PROGRAM CONSTITUTES GROUNDS FOR DISMISSAL FROM THE PROGRAM.

The following examples of behavior may be grounds for dismissal from the nursing program or for licensure application review by the Alabama Board of Nursing. Any individual who:

1. Is guilty of fraud or deceit in procuring or attempting to procure a license.
2. Is guilty of a crime involving moral turpitude or of gross immorality that would tend to bring reproach upon the nursing profession.
3. Is unfit or incompetent due to the use of alcohol, or is addicted to the use of habit-forming drugs to such an extent as to render the licensee unsafe or unreliable.
4. Is mentally incompetent.
5. Is guilty of unprofessional conduct of a character likely to deceive, defraud, or injure the public in matters pertaining to health.
6. Has willfully or repeatedly violated any of the provisions of this act.
7. Has been convicted of a felony.
8. Has been convicted of any violation of a Federal or State law relating to controlled substances.
9. Has any other reasons authorized by law.
10. Has been placed on a State and/or Federal abuse registry.
11. Has been court martialed or disciplined or administratively discharged by the military.

Students who have demonstrated any of the behaviors prior to or during attendance of the nursing program will have to provide appropriate explanatory documentation with their state board license application. Any concerns related to the above should be discussed with the nursing advisor.

For additional information or a copy of the complete Code,
contact the Alabama Board of Nursing. Website: http://www.abn.state.al.us/main/downloads/admin-code/contents.html

ANTICIPATED EXPENSES:
As a student in the ADN program, you can anticipate certain necessary expenses. First of all, the tuition rate is the same as that for other NW-SCC students, but nursing program students will incur other expenses, which are listed below. Note that the amounts listed are approximations and that they are subject to change without notice.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>Standardized Tests</td>
<td>$400.00</td>
</tr>
<tr>
<td>Computer Software</td>
<td>$300.00</td>
</tr>
<tr>
<td>Annual Physical Exam, TB Test &amp; Shots</td>
<td>$750.00</td>
</tr>
<tr>
<td>Uniforms and Small Equipment</td>
<td>$400.00</td>
</tr>
<tr>
<td>Clinical Kit</td>
<td>$60.00</td>
</tr>
<tr>
<td>Clinical ID Badges</td>
<td>$10.00</td>
</tr>
<tr>
<td>Drug Screening</td>
<td>$80.00</td>
</tr>
<tr>
<td>Liability Insurance</td>
<td>$40.00</td>
</tr>
<tr>
<td>Graduation Pictures</td>
<td>$25.00</td>
</tr>
<tr>
<td>Graduation Pin (optional)</td>
<td>$500.00</td>
</tr>
<tr>
<td>RN Licensure Application Fee</td>
<td>$88.50</td>
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<tr>
<td>RN Temporary Permit (AL) (optional)</td>
<td>$50.00</td>
</tr>
<tr>
<td>NCLEX-RN</td>
<td>$200.00</td>
</tr>
<tr>
<td>Background Checks</td>
<td>$70.00</td>
</tr>
<tr>
<td>NCLEX-RN Review (optional)</td>
<td>$300.00</td>
</tr>
</tbody>
</table>

| Total Ultrasound, and/or Practice          | $4,893.50|
| Tuition (Nursing Courses Only)             | $5,964.00|
| Parking Decal                              | $20.00   |
|                                           | $10,857.50|

NOTICE: In addition to the expenses listed, you are responsible for transportation, meals, health care expenses, any liability incurred during and while traveling to and/or from educational experiences.

Registered Nursing

513801 NUR

ASSOCIATE IN APPLIED SCIENCE DEGREE

Available: Phil Campbell Campus
Advisors:
A. Bales (6298) abales@nwscc.edu
P. Ford (5306) pford@nwscc.edu
M. Hester (6250) mhester@nwscc.edu
B. Humphres (6237) bhumphres@nwscc.edu
D. Jaynes (6221) dromans@nwscc.edu
S. Logan (6252) slogans@nwscc.edu
M. Mays (6256) melissam@nwscc.edu
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D. Sykes (6249) dsykes@nwscc.edu
C. Tice (6293) ctice@nwscc.edu
C. Tidwell (5305) cindy@nwscc.edu

The Associate in Applied Science Degree in Nursing is a five semester program, which prepares the graduate to sit for the Registered Nurse licensure examination. Candidates for the Associate in Applied Science in Nursing must complete the prescribed general education course requirements, plus 42 hours in nursing for a total of 72 hours. See your advisor for program completion options.

Semester I

Semester Hours
MTH 100 (Intermediate College Algebra) ............................. 3
BIO 101 Human Anatomy and Physiology I .......................... 4
NUR 102 Fundamentals of Nursing ..................................... 6
NUR 103 Health Assessment ........................................... 1
NUR 104 Introduction to Pharmacology ............................. 1

Semester II

+ENG 101 English Composition I** ................................... 3
+BIO 202 Human Anatomy and Physiology II ....................... 4
NUR 105 Adult Nursing ................................................. 8
NUR 106 Maternal and Child Nursing ............................... 5

Semester III

+PSY 200 Psychology .................................................... 3
+BIO 220 Microbiology .................................................. 4
NUR 201 Nursing Through the Lifespan I ......................... 12

Semester IV

SPH 106 or 107 or 116 Speech ....................................... 3
PSY 210 Human Growth and Development .......................... 3
NUR 202 Nursing Through the Lifespan II ....................... 12

Semester V

+++Humanities Elective .................................................. 3
NUR 203 Nursing Through the Lifespan III ....................... 6
NUR 204 Role Transition for the Registered Nurse .......... 4
(Preceptor 3:1) ......................................................... 13

Total Semester Credit Hours .......................................... 72

Registered Nursing

513801 MOB

MOBILITY (LPN-RN)

ASSOCIATE IN APPLIED SCIENCE DEGREE

Available: Phil Campbell Campus

PREREQUISITES:
MTH 100 (Intermediate College Algebra) or Higher Level (3 credit hours)*
BIO 201 Human Anatomy and Physiology I (4 credit hours)
BIO 202 Human Anatomy and Physiology II (4 credit hours)
ENG 101 English Composition I (3 credit hours)**

Total Prerequisites: 14 credit hours

Semester II (Spring)

(1st semester for mobility students) Semester Hours
NUR 200 Nursing Career Mobility Assessment .................... 6
Availability of this course is dependent upon sufficient demand. Contact Nursing Department for more information.

NOTE: Students that graduated from the Alabama College System Practical Nursing Curriculum within 2 years will not be required to take NUR 200.

Semester III (Summer)

+PSY 200 Psychology .................................................... 3
+BIO 220 Microbiology .................................................. 4
NUR 201 Nursing Through the Lifespan I ....................... 12

Semester IV

SPH 106 or 107 or 116 Speech ....................................... 3
PSY 210 Human Growth and Development .......................... 3
NUR 202 Nursing Through the Lifespan II ....................... 15

Semester V

TOTAL CREDIT HOURS ................................................... 72
+++Humanities Elective.......................................................... 3
NUR 203 Nursing Through the Lifespan III .......................... 6
NUR 204 Role Transition for the Registered Nurse............. 4  
(Preceptor 3:1) 13

Skills Validations required for NUR 200. Upon successful completion of NUR 200, students will progress into NUR 201. Upon successful completion of the Mobility Program, students will receive non-traditional credit hours.

Total Semester Credits......................................................... 72

*May choose from MTH 110, MTH 112, MTH 265, or equivalent.

**Keyboarding skills are essential for the successful completion of English 101.
+Must be completed with a grade of “C” or higher before or during the semester noted above. All other general education courses must be completed with a grade of “C” or higher in order to graduate.

+++Choose from ART (for transfer program - ART 100); Music (for transfer program - MUS 101); Foreign Language; Philosophy; Religion; Theater; Literature

Computer competency skills are embedded within one or more courses required in this curriculum.

Practical Nursing  513901 LPN Career Certificate

Available: Shoals Campus
Advisors: P. Ford (5306) pford@nwsc.edu
S. Smith (6207/5337) shelia.smith@nwsc.edu
C. Tidwell (5305) cindy@nwsc.edu

This certificate is designed for training capable individuals who desire to become Licensed Practical Nurses (LPN). The Practical Nursing program enables the student to obtain the skills and knowledge leading to employment in the health care field. Topics related to safe, knowledgeable, and efficient nursing care are included. The certificate is approved by the Alabama Board of Nursing. Graduates are eligible to apply to take the state licensing examination (NCLEX-PN) for licensure as Practical Nurses. Graduation from the program however, does not guarantee Board of Nursing approval to take the NCLEX-PN licensing examination. See Standards of Conduct in the Registered Nursing section of the catalog.

The Practical Nursing Plan is three semesters in length. Students are admitted in the Fall Semester.

The admission criteria is currently under review and is subject to change.

Students are admitted according to the following priority:

1. First time students
2. Readmissions
3. Transfer students with previous nursing education

PRACTICAL NURSING GENERAL ADMISSION REQUIREMENTS:

Minimum admission standards for Practical Nursing include:

1. Unconditional admission to the college.
2. Receipt of completed application for the Practical Nursing Program by April 15th for the fall admission annually.
3. Have a minimum of 2.50 cumulative grade point average based on the most recent 24 credit hours of college work completed and on clear academic status.
4. Eligibility for English 101 and Math 116, MTH 100 (Intermediate College Algebra) or higher as determined by college policy and satisfaction of college reading requirement.
5. Good standing with the college.
6. Have taken the TEASV and have official scores on file in the NW-SCC nursing office by application deadline. Test must have been completed within the last three years prior to the application deadline.
7. Meeting the essential functions or technical standards required for nursing. (See Essential Functions in Registered Nursing section of the catalog.)

Admission to the PN program is competitive. Meeting minimum requirements does not guarantee acceptance.

The College reserves the right to adjust requirements or use additional criteria to determine admission.

PROGRAM REQUIREMENTS

After acceptance each student must:

1. Submit completed medical examination forms (at student expense) that provide evidence the student is free of communicable disease and chemical dependency, and is physically and psychologically able to participate fully in both classroom and clinical aspects of the program. The nursing faculty reserves the right to require at any time (at student expense) an additional medical examination in order to evaluate the student’s state of physical, mental, and/or emotional health such as during pregnancy, infectious diseases, interference with mobility, emotional instability, chemical dependence, etc. When an examination or treatment is required, written proof must be provided by the physician attesting to the student’s ability to carry out both classroom and clinical requirements of the program.

NOTE: Northwest-Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by a clinical agency.

2. Meet the Essential Functions with or without reasonable accommodations. These standards relate to physical, mental, and emotional capabilities of prospective students and are available in writing from the Nursing Department. Additional health criteria are required by clinical agencies.

3. Purchase regulation uniforms and specified accessories.

4. Possess current certification in cardiopulmonary resuscitation at the health care provider level (BLS). Community CPR is not acceptable. If a student is not certified with the appropriate CPR, the student may take EMS 100 Cardiopulmonary Resuscitation I. This course meets the CPR requirement for two years.

5. Receive certain immunizations at the student’s expense.

6. Purchase professional liability insurance through the College.

7. Participate in and pay for periodic standardized testing.

8. Participate in and pay for drug testing as directed by Health Studies Division.
9. Participate in and pay for background checks as directed by Health Studies Division.

NOTICE: The Alabama Community College System Standardized Curriculum is continuing to be reviewed and analyzed. Modifications will be made as needed.

Refer to the Registered Nursing sections for the following information which applies to both the RN and LPN programs: Essential Functions and Standards of Conduct.

Progression Policy: Please refer to the Progression Policy for Nursing Programs for the Alabama College System found in the Registered Nursing Section.

Transfer Policy: Please refer to the Transfer Policy for Nursing Programs for the Alabama College System found in the Registered Nursing Section.

The following are specific policies for the PN Program for students wishing to transfer:

1. You will receive no credit for any nursing education that was acquired more than one (1) year prior to the transfer.
2. You must complete two semesters of the program at NW-SCC.
3. You must have attended a comparable nursing program approved by the appropriate State Board of Nursing.

EXPENSES:
The tuition rate is the same as that for other NW-SCC students, but nursing program students will incur other expenses, which are listed below. Note that the amounts listed are approximations and that they are subject to change without notice.

Textbooks and course outlines .............................................. $1,000.00
Professional liability insurance ........................................... $20.00
Drug Screening ...................................................................... $40.00
Laboratory kit ......................................................................... $60.00
Uniforms(s) and necessary equipment .................................... $345.00
(Stethoscope, watch with second hand, pen light, etc.)
Physical examination .............................................................. $735.00
(Immunizations, if needed)
Standardized Exams ............................................................... $250.00
Background Check ................................................................. $60.00
Clinical ID Badge ..................................................................... $5.00
Computer Software ................................................................. $400.00
Parking Decal .......................................................................... $20.00

Additional expenses anticipated during the final semester of the PN program are approximate. These are as follows:

ABN application ...................................................................... $88.50
NCLEX application .................................................................. $200.00
Temporary permit (optional) ABN Only ................................... $50.00
Nursing Pin (optional) ............................................................. $45.00
NCLEX review course (optional) ............................................ $250.00

NOTICE: In addition to the expenses listed above, you are responsible for transportation, meals, health care expenses, any liability incurred during and while traveling to and/or from educational experiences.

### Career Certificate

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Semester I</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>+MTH 116 Mathematical Applications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Higher Level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+BIO 201 Human Anatomy and Physiology I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NUR 102 Fundamentals of Nursing</td>
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<tr>
<td></td>
<td></td>
<td>NUR 103 Health Assessment</td>
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<tr>
<td></td>
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<td>NUR 104 Introduction to Pharmacology</td>
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<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ENG 101 English Composition I</td>
</tr>
<tr>
<td>+BIO 202 Human Anatomy and Physiology II</td>
</tr>
<tr>
<td>NUR 105 Adult Nursing</td>
</tr>
<tr>
<td>NUR 106 Maternal and Child Nursing</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 107 Adult/Child Nursing</td>
</tr>
<tr>
<td>NUR 108 Psychosocial Nursing</td>
</tr>
<tr>
<td>NUR 109 Role Transition for the Practical Nurse</td>
</tr>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** .............................................. **49**

+Must be completed with a grade of "C" or higher before or during semester noted above.

### Nursing Assistant

**Available:** Shoals Campus

**Advisors:** S. Smith (6207/5337) shelia.smith@nwscc.edu
C. Tidwell (5305) cindy@nwscc.edu

The Nurse Assistant course includes instruction in theory, nursing skills lab, and a clinical rotation in a health care facility. A basic introduction to the health field and home health care is provided. This course does not require a high school diploma or GED certificate for admission.

After successful completion of the 80-hour nurse assistant course, NAS 100, approved by the Alabama Department of Health, the student will meet requirements to take the National Nurse Aide Assessment Program (NNAAP) Examination. The student must take and pass the NNAAP Examination within twenty-four (24) months of having successfully completed a state approved nurse aide training program. The Examination is given by the Nurse Aide Competency Evaluation Service (NACES) at Regional Test Sites. Students must be at least 18 years of age in order to take the State Nurse’s Aide Certification Test.

This certification enables the Nursing Assistant to obtain employment in nursing homes, hospitals, or home health care agencies.

**Clinical requirements:**

1. Ability to meet Essential functions requirements
2. Current proof of negative TB skin test (2 step)
3. Verification of current CPR certification at the American Heart Association, Health Provider level (BLS)
4. Negative drug screen (performed by school-approved vendor)
5. Clear criminal background check (performed by school approved vendor)

Note that the amounts listed are approximations and that they
are subject to change without notice.
Programs

Alabama Board of Barbering and Cosmetology examination. The course is designed to prepare for licensure as professional salon and spa owners and operators. Includes instruction in professional salon and spa management, marketing and advertising; salon management, the cosmetic and salon supply industries; and labor relations; applicable business and professional laws and regulations, professional standards and image; and customer service.

This course covers the important issues and critical steps involved in starting a new business from scratch. Topics covered include developing a business plan, creating a successful marketing strategy, setting up the legal basis for business, raising start-up funds, attracting and managing human resources, managing cost, and developing a custom base.

The course is designed to develop entry-level management skills for the beauty industry. Topics include job-seeking, leadership and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon.

Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the theory and practical skills necessary to complete successfully the required NIC (National Interstates Council) testing, Alabama Board of Barbering and Cosmetology examination.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>ENG 101 English Composition I</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Area II: Humanities and Fine Arts</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Fine Arts Elective: Choose one from among:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 100 Art Appreciation OR</td>
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</tbody>
</table>

MUS 101 Music Appreciation

Area III: Natural Sciences and Mathematics

Area IV: History, Social and Behavioral Science

Choose one from among:

Area V: Technical Concentration

**Keyboarding skills are essential for the successful completion of English 101.**

Area III: Natural Sciences and Mathematics

Area IV: History, Social and Behavioral Science

**Keyboarding skills are essential for the successful completion of English 101.**

Salon and Spa Management 120412 SCO

Associate in Applied Science Degree

Cosmetology Option

Available: Shoals Campus
Advisors: J. Hackworth (5335) joehackworth@nwscc.edu
M. Grissom (5420) melinda.grissom@nwscc.edu

Cosmetology is available for use in the salon.

The course is designed to prepare for licensure as professional salon and spa owners and operators. Includes instruction in professional salon and spa management, marketing and advertising; salon management, the cosmetic and salon supply industries; and labor relations; applicable business and professional laws and regulations, professional standards and image; and customer service.

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MUS 101 Music Appreciation

Area III: Natural Sciences and Mathematics

Area IV: History, Social and Behavioral Science

Choose one from among:

Area V: Technical Concentration

**Keyboarding skills are essential for the successful completion of English 101.**

Salon and Spa Management 120412 CSC

Cosmetology Option

Career Certificate

Available: Shoals Campus
Advisors: J. Hackworth (5335) joehackworth@nwscc.edu
M. Grissom (5420) melinda.grissom@nwscc.edu

A career certificate that prepares cosmetologists, hairstylists, and other personal grooming specialists to manage beauty parlors, shops, and full-service or specialized salon and to prepare for licensure as professional salon and spa owners and operators. Includes instruction in professional salon and spa management, marketing and advertising; advertising and promotion; salon management; the cosmetic and salon supply industries; and labor relations; applicable business and professional laws and regulations, professional standards and image; and customer service.

Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the theory and practical skills necessary to complete successfully the required NIC (National Interstates Council) testing, Alabama Board of Barbering and Cosmetology examination.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

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MUS 101 Music Appreciation

Area III: Natural Sciences and Mathematics

Area IV: History, Social and Behavioral Science

Choose one from among:

Area V: Technical Concentration

**Keyboarding skills are essential for the successful completion of English 101.**
Area I: Written Composition ........................................ 3
ENG101 English Composition I ...................................... 3
Area III: Natural Sciences and Mathematics .................. 3
MTH116 Mathematical Applications ................................ 3
Area V: Technical Concentration
COS190 Internship in Cosmetology ................................ 3
SAL133 Salon Management Technology ................................ 3
Major Requirements
COS111 Introduction to Cosmetology .............................. 3
COS112 Introduction to Cosmetology Lab ......................... 3
COS113 Theory of Chemical Services ............................. 3
COS114 Chemical Services Lab ...................................... 3
COS115 Hair Coloring Theory ....................................... 3
COS116 Hair Coloring Lab ........................................... 3
COS117 Basic Spa Techniques ....................................... 3
COS118 Basic Spa Techniques Lab ................................ 3
COS123 Cosmetology Salon Practices ............................. 3
COS143 Specialty Hair Preparation Tech .......................... 3
COS144 Hair Shaping .................................................. 3
COS145 Hair Shaping Lab ............................................. 3

Semester Hours

General Education Core ............................................. 6
Technical Concentration and Major ............................... 42
Total Semester Credit Hours ........................................ 48

Salon and Spa Management 120412 SSE
Associate in Applied Science Degree
Esthetics Option

Available: Shoals Campus
Advisor: C. Bankston (5265) bankstonc@nwsc.edu
M. Grissom (5420) melinda.grissom@nwsc.edu
J. Hackworth (5335) jehackworth@nwsc.edu

This degree program prepares skin care specialist to manage a salon or spa business, and to prepare for licensure as a professional Esthetician salon and spa owner operator. Includes instruction in cosmetic services marketing and retailing; advertising and promotion; salon management; the cosmetic and salon supply industries; hiring; supervision, and labor relations; applicable business and professional laws and regulations; professional standards and image; and customer service.

Upon completion, the student should be able to demonstrate the theory and practical skills necessary to complete successfully the required NIC (National Interstates Council) testing, Alabama Board of Barbering and Cosmetology examination.

Semester Hours

Area I: Written Composition ........................................ 6
ENG101 English Composition I ...................................... 3
Area II: Humanities and Fine Arts ................................. 6
Choose one from among:
ART100 Art Appreciation OR
MUS101 Music Appreciation ....................................... 3
SPH107 Fund of Public Speaking .................................. 3
Area III: Natural Sciences and Mathematics ................. 4
PHS111 Physical Science I .......................................... 4
Area IV: History, Social and Behavioral Science ............. 3
Choose one from among:
HIS201 United States History I OR
PSY200 General Psychology OR
SOC200 Introduction to Sociology ............................... 3
Area V: Technical Concentration and Electives
CIS146 Microcomputer Applications .............................. 3
COS190 Internship in Cosmetology ............................... 3
SAL201 Entrepreneurship for Salon/Spa ......................... 3
SAL133 Salon Management Technology ........................ 3

Cosmetology Option
COS117 Basic Spa Techniques ..................................... 3
COS118 Basic Spa Techniques Lab ................................. 3
COS127 Esthetics Theory ............................................ 3
COS134 Advanced Esthetics ........................................ 3
COS135 Advanced Esthetics Applications ....................... 3
COS163 Facial Treatments .......................................... 3
COS164 Facial Machine ............................................. 3
COS165 Related Subjects Estheticians ......................... 3
COS166 Skin Care Bacteriology & Sanitation .................... 3
COS167 State Board Review ........................................ 3
COS169 Skin Functions ............................................. 3
COS181 Special Topics .............................................. 3

General Education Core ............................................ 19
Technical Concentration ............................................ 48
Total Semester Credit Hours ....................................... 67

Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon
**Salon and Spa Management**

**Esthetics Option**

**Career Certificate**

Available: Shoals Campus  
Advisor:  
C. Bankston (5265) bankstonc@nwsc.edu  
M. Grissom (5420) melinda.grissom@nwsc.edu  
J. Hackworth (5335) jpehackworth@nwsc.edu

A certificate that prepares skin care specialist to manage a salon or spa business, and to prepare for licensure as a professional Esthetician salon and spa owner operator. Includes instruction in cosmetic services marketing and retailing; advertising and promotion; salon management; the cosmetic and salon supply industries; hiring; supervision, and labor relations; applicable business and professional laws and regulations; professional standards and image; and customer service.

Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the theory and practical skills necessary to complete successfully the required NIC (National Interstates Council) testing, Alabama Board of Barbering and Cosmetology examination.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>ORI 107 Student Success</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Area I: Written Composition</strong></td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Area III: Natural Sciences and Mathematics</strong></td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Area V: Technical Concentration and Electives</strong></td>
<td>3</td>
</tr>
<tr>
<td>COS 190 Internship in Cosmetology</td>
<td>3</td>
</tr>
<tr>
<td>SAL 133 Salon Management Technology</td>
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<tr>
<td><strong>Cosmetology Option</strong></td>
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<tr>
<td>COS 117 Basic Spa Techniques</td>
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</tr>
<tr>
<td>COS 118 Basic Spa Techniques Lab</td>
<td>3</td>
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<tr>
<td>COS 127 Esthetics Theory</td>
<td>3</td>
</tr>
<tr>
<td>COS 134 Advanced Esthetics</td>
<td>3</td>
</tr>
<tr>
<td>COS 135 Advanced Esthetics Applications</td>
<td>3</td>
</tr>
<tr>
<td>COS 163 Facial Treatments</td>
<td>3</td>
</tr>
<tr>
<td>COS 164 Facial Machine</td>
<td>3</td>
</tr>
<tr>
<td>COS 165 Related Subjects Estheticians</td>
<td>3</td>
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<tr>
<td>COS 166 Skin Care Bacteriology &amp; Sanitation</td>
<td>3</td>
</tr>
<tr>
<td>COS 167 State Board Review</td>
<td>3</td>
</tr>
<tr>
<td>COS 169 Skin Functions</td>
<td>3</td>
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<tr>
<td>COS 181 Special Topics</td>
<td>3</td>
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<td><strong>General Education Core</strong></td>
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<tr>
<td><strong>Technical Concentration</strong></td>
<td>42</td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong></td>
<td>49</td>
</tr>
</tbody>
</table>

**Associate in Occupational Technology Degree**

| Accounting Technology | 309999 ACR/AOD |
| Air Conditioning/Refrigeration Technology | 309999 AWT/AWT |
| Automotive Collision Repair | 309999 ABR/ABA/ABA |
| Automotive Service Technology | 309999 ATR/ART |
| Carpentry/Cabinetmaking | 309999 BCB/BCB |
| Electrical Technology | 309999 EAC |
| Machine Shop Technology | 309999 MWT |
| Welding | 309999 WMT |
| **Career Certificates** |  |
| Accounting Technology | 520302 ACT |
| A/C/Refrigeration Technology | 150501 ACR |
| Automotive Collision Repair | 470603 ABR |
| Automotive Service Technology | 470604 AST |
| Carpentry/Cabinetmaking | 460201 CAR |
| Electrical Technology | 460302 ELT |
| Industrial Systems Technology - Mechanical | 470303 IMC |
| Machine Tool/Computer |  |
| Numerical Control (CNC) | 480503 MSP |
| Office Administration | 520401 OAD |
| Paramedic | 510904 EMS |
| Practical Nursing (LPN) | 511613 LPN |
| Salon and SPA Management |  |
| Esthetics Option | 120412 SSE |
| Cosmetology Option | 120412 SSC |
| Welding | 480508 WEL |

**Short-Term General Certificates**

| Basic Automotive Service Technology | 470604 AUM |
| Advanced Automotive Service Technology | 470604 AAS |
| Basic Automotive Collision Repair | 470603 ABR |
| Biomedical Equipment Technology | 150401 BET |
| Basic Cabinetmaking | 480703 CAB |
| Basic Carpentry | 460201 BC |
| Chemical Laboratory Technician | 410301 ChM |
| Child Development | 190708 CHD |
| Computer Aided Design Engineering Technology | 151301 DDT |
| Computer Technology |  |
| PC Hardware Technician | 110101 PCH |
| PC Software Technician | 110101 PST |
| EMT | 510904 EMT |
| Advanced EMT | 510904 EMA |
| Energy Management Technology | 150503 ECT |
| Environmental, Health & Safety Technician | 150507 EHS |
| Fire Science/Fire Services Management | 430202 FSC |
| Industrial Systems Technology | 470303 INS |
| Injection Molding Technology | 470303 IMT |
| Medical Assisting Technology |  |
| Phlebotomy Option | 510801 PBY |
| Medical Billing and Coding Option | 510801 MCO |
| Water & Wastewater Management | 150506 W&M |
| Basic Welding Technology | 480508 WDT |

**Cosmetology Services**

The Cosmetology Program offers salon services to the public on selected days. Students perform hairstyling as well as chemical, facial and nail services for a minimum charge. For further information on scheduling an appointment contact the instructors at: Nail Technology 256.331.5220, Skin Care/Facials 256.331.5295, and Hairstyling Services 256.331.5304.
Accounting Technology
AOT Degree

Available: Shoals Campus
Advisors: P. Hogan (5232) hogan@nwsc.edu
         E. Carter (5277) carter@nwsc.edu
         J. Baltes (5353) jbaltes@nwsc.edu

The AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree.

Core Degree Requirements for the Associate in Occupational Technology Degree

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition ........................................6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 101 English Composition I .......................................3</td>
</tr>
<tr>
<td></td>
<td>ENG 130 Technical Report Writing or ENG 102 English Composition II ...3</td>
</tr>
<tr>
<td>Area II:</td>
<td>Humanities and Fine Arts ........................................3</td>
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<tr>
<td>Area III:</td>
<td>Natural Science and Mathematics ....................................9-10</td>
</tr>
<tr>
<td></td>
<td>MTH 116 or MTH 246 or MTH 100 or Higher ........................3</td>
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<tr>
<td></td>
<td>CIS 146 Microcomputer Applications ..................................3</td>
</tr>
<tr>
<td></td>
<td>Math or Science Electives ........................................3-4</td>
</tr>
<tr>
<td>Area IV:</td>
<td>History, Social and Behavioral Sciences ................................3</td>
</tr>
</tbody>
</table>
|                | ECO 231 Principles of Macroeconomics (preferred) ...............

Minimum General Requirements ........................................22-23

Major Requirements

ACT 104 Introduction to Business .....................................3
ACT 114 Introduction to Accounting Database Resources ........3
ACT 115 Introduction to Accounting Computer Resources ..........3
ACT 141 Basic Accounting Principles ................................ 3
ACT 142 Advanced Accounting Principles ................................3
ACT 246 Microcomputer Accounting ....................................3
ACT 247 Advanced Acct. Applications on the Microcomputer ......3
ACT 249 Payroll Accounting ........................................3
ACT 253 Income Tax ................................................3
ACT 256 Cost Accounting ........................................3
ACT 262 Directed Studies ........................................3
Total Major Requirements .............................................33

Minor Requirements

Business Management and Supervision 309999 ACB
BUS 275 Principles of Management ....................................3
BUS Electives ......................................................................9
Total Minor Requirements .............................................12

Minor Requirements

Office Administration 309999 AOD
OAD 101 Keyboarding ................................................3
OAD 125 Word Processing ........................................3
OAD 130 Electronic Calculations .....................................3
OAD 138 Records/Information Management ........................3
Total Minor Requirements .............................................12

General Requirements ..................................................22

Total Requirements for AOT Degree .............................67-68

Accounting Technology
Career Certificate

520302 ACT

Available: Shoals Campus
Advisors: P. Hogan (5232) hogan@nwsc.edu
         E. Carter (5277) carter@nwsc.edu
         J. Baltes (5353) jbaltes@nwsc.edu

Accounting Technology is designed to meet the need for personnel in a broad range of accounting fields, including accounting systems, recordkeeping, financial statements, payroll accounting, and other areas.

The certificate is designed for the student who does not intend to transfer to a four-year institution but intends to seek immediate employment. This certificate is appropriate for students who are employed and wish to gain a better understanding of accounting.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

General Education Requirements

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<tr>
<td></td>
<td>OAD 133 or BUS 215 Business Communications ........................3</td>
</tr>
<tr>
<td>Total General Education Requirement</td>
<td>..........................12</td>
</tr>
</tbody>
</table>

Major Requirements

ACT 104 Introduction to Business .....................................3
ACT 115 Introduction to Accounting Computer Resources ........3
ACT 141 Basic Accounting Principles ................................ 3
ACT 142 Advanced Accounting Principles ................................3
ACT 246 Microcomputer Accounting ....................................3
ACT 247 Advanced Accounting Applications on the Microcomputer ........................................3
ACT 249 Payroll Accounting ........................................3
ACT 253 Income Tax ................................................3
ACT 256 Cost Accounting ........................................3
ACT 262 Directed Studies ........................................3
Total Major Requirements .............................................30

Total Semester Credit Hours ........................................43

**Keyboarding skills are essential for the successful completion of English 101.
Air Conditioning/Refrigeration Technology
AOT Degree

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscce.edu
J. Hackworth (5335) joehackworth@nwscce.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

Core Degree Requirements for the Associate in Occupational Technology Degree

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Semester Hours

| Area I: Written Composition | 3 |
| Area II: Humanities and Fine Arts | 3 |
| Area III: Natural Science and Mathematics | 9 |
| A minimum of 3 hours in MTH 116 or MTH 100 or Higher is required. The additional 6 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physical science, physics, environmental technology and computer science. |
| Area IV: History, Social and Behavioral Sciences | 3 |
| Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology. |

Minimum General Requirements: 19

Major Requirements Semester Hours

| ACR 111 Refrigeration Principles | 3 |
| ACR 112 HVACR Service Procedures | 3 |
| ACR 113 Refrigeration Piping Practices | 3 |
| ACR 119 Fundamentals of Gas Heating Systems | 3 |
| ACR 123 HVACR Electrical Components | 3 |
| ACR 126 Commercial Heating Systems | 3 |
| ACR 132 Residential Air Conditioning | 3 |
| ACR 135 Mechanical/Gas/Safety Codes | 3 |
| ACR 148 Heat Pump Systems I | 3 |
| ACR 181 Parallel Refrigeration | 3 |
| ACR 203 Commercial Refrigeration | 3 |
| ACR 205 System Sizing and Air Distribution | 3 |
| ACR 209 Commercial Air Conditioning Systems | 3 |
| ACR Elective | 6 |
| Total Major Requirements | 45 |

Minor Requirements:

| Electrical Technology | 309999 AET |

<table>
<thead>
<tr>
<th>Minor Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English I</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
</tr>
<tr>
<td>ACR 111 Refrigeration Principles</td>
</tr>
<tr>
<td>ACR 112 HVACR Service Procedures</td>
</tr>
<tr>
<td>ACR 113 Refrigeration Piping Practices</td>
</tr>
<tr>
<td>ACR 119 Fundamentals of Gas Heating Systems</td>
</tr>
<tr>
<td>ACR 121 Principles of Electricity for HVACR</td>
</tr>
<tr>
<td>ACR 122 HVACR Electrical Circuits</td>
</tr>
<tr>
<td>ACR 123 HVACR Electrical Components</td>
</tr>
<tr>
<td>ACR 126 Commercial Heating Systems</td>
</tr>
<tr>
<td>ACR 132 Residential Air Conditioning</td>
</tr>
<tr>
<td>ACR 135 Mechanical/Gas/Safety Codes</td>
</tr>
<tr>
<td>ACR 148 Heat Pump System I</td>
</tr>
</tbody>
</table>

Total Minor Requirements: 12

Minor Requirements

Welding

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 108 SMAW Fillet/OFC</td>
<td>3</td>
</tr>
<tr>
<td>WDT 109 SMAW Fillet/PAC/CAC</td>
<td>3</td>
</tr>
<tr>
<td>WDT 122 SMAW Fillet/OFC Lab</td>
<td>3</td>
</tr>
<tr>
<td>WDT 123 SMAW Fillet/PAC/CAC Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Minor Requirements: 12

General Requirements: 19

Total Requirements for AOT Degree: 76

*Computer competency skills are embedded within one or more courses required in this curriculum.

Air Conditioning/Refrigeration Technology

Career Certificate

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscce.edu
J. Hackworth (5335) joehackworth@nwscce.edu

The health, comfort, and productivity of any nation is dependent upon air conditioning and refrigeration equipment. Air conditioning has become a necessity rather than a luxury in today’s homes, offices, public buildings, and industries.

Air Conditioning/Refrigeration Technology covers the practical application of planning, installing, and servicing heating, air conditioning and refrigeration equipment in residential and commercial establishments.

The increased use of air conditioning and refrigeration in homes and work environments provides growing job opportunities in transportation, food preservation, manufacturing, space programs, medical services, and many others.

Transfer Students: Students may receive up to one semester for clock hours and credit units earned at another institution.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.
ACR 181 Parallel Refrigeration 1 0 3
ACR 203 Commercial Refrigeration 1 4 3
ACR 205 System Sizing and Air Distribution 1 4 3
ACR 209 Commercial Air Conditioning 1 4 3
ACR Elective 6

Total Semester Credit Hours ................................................. 58

**Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical course work completed at another institution.

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Air Conditioning/Refrigeration 150501 ARB Technology

ACR Basic Short-Term Certificate

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided technical knowledge and job specific skills that enable them to compete favorably in the Air Conditioning and Refrigeration industry. Opportunities for Air Conditioning and Refrigeration technicians exist in business service industries, manufacturing, repair work, and construction. Graduates of Basic Air Conditioning and Refrigeration Technology certificates will be prepared to enter the workforce as an entry level HVAC&R technician.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

Semester Hours
ACR 111 Principles of Refrigeration 3
ACR 121 Principles of Electricity for HVACR 3
ACR 148 Heat Pump Systems I 3
ACR 119 Fundamentals of Gas Heating Systems 3

Total Semester Credit Hours 12

Air Conditioning/Refrigeration 150501 ACR1 Technology

ACR Level 1 Short-Term Certificate

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided technical knowledge and job specific skills that enable them to compete favorably in the Air Conditioning and Refrigeration industry. Opportunities for Air Conditioning and Refrigeration technicians exist in business service industries, manufacturing, repair work, and construction. Graduates of Basic Air Conditioning and Refrigeration Technology certificates will be prepared to enter the workforce as an entry level HVAC&R technician.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

Semester Hours
ACR 111 Principles of Refrigeration 3
ACR 121 Principles of Electricity for HVACR 3
ACR 148 Heat Pump Systems I 3
ACR 119 Fundamentals of Gas Heating Systems 3

Total Semester Credit Hours 12

Air Conditioning/Refrigeration 150501 ACR2 Technology

ACR Level 2 Short-Term Certificate

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided technical knowledge and job specific skills that enable them to compete favorably in the Air Conditioning and Refrigeration industry. Opportunities for Air Conditioning and Refrigeration technicians exist in business service industries, manufacturing, repair work, and construction. Graduates of Basic Air Conditioning and Refrigeration Technology certificates will be prepared to enter the workforce as an entry level HVAC&R technician.

Entering students are required to complete ORI 107.
Transfer students are exempt from this requirement.

Semester Hours
ACR 112 HVACR Service Procedures 3
ACR 209 Commercial Air Conditioning Systems 3
ACR 205 Systems Sizing and Air Distribution 3
ACR 122 HVACR Electrical Circuits 3

Total Semester Credit Hours 12

Air Conditioning/Refrigeration 150501 ACR3 Technology

ACR Level 3 Short-Term Certificate

Available: Shoals Campus
Advisors: R. Corsbie (5251) rcorsbie@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided technical knowledge and job specific skills that enable them to compete favorably in the Air Conditioning and Refrigeration industry. Opportunities for Air Conditioning and Refrigeration technicians exist in business service industries, manufacturing, repair work, and construction. Graduates of Basic Air Conditioning and Refrigeration Technology certificates will be prepared to
enter the workforce as an entry level HVAC&R technician.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>ACR 210 Troubleshooting HVACR Systems</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACR 203 Commercial Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACR 135 Mechanical/Gas/Safety Codes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACR 147 Refrigeration Transition and Recovery Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** 12

**Automotive Collision Repair**

**AOT Degree**

Available: Shoals Campus

Advisors: E. Reid (5231) ereid@nwssc.edu
J. Hackworth (5335) joehackworth@nwssc.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

**Core Degree Requirements for the Associate in Occupational Technology Degree**

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Area I: Written Composition</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English Composition I and/or Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Area II: Humanities and Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Area III: Natural Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 hours in MTH 116 or MTH 100 or Higher is required. The additional 6 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physical science, physics, environmental technology and computer science.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area IV: History, Social and Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.</td>
<td></td>
</tr>
</tbody>
</table>

**Minimum General Requirements** 19

**Major Requirements** 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>ABR 111 Non-Structural Repair</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ABR 114 Non-Structural Panel Replacement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 122 Surface Preparation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 123 Paint Application &amp; Equipment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 151 Safety &amp; Environmental Practices</td>
<td>3</td>
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<tr>
<td></td>
<td>ABR 154 Auto Glass and Trim</td>
<td>3</td>
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<tr>
<td></td>
<td>ABR 156 Auto Cutting and Welding</td>
<td>3</td>
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<tr>
<td></td>
<td>ABR 157 Plastic Repairs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 213 Automotive Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 214 Automotive Structural Repair</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 223 Automotive Mechanical Components</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR 224 Automotive Electrical Components</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABR Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Major Requirements** 42

**Business Management and Supervision** 309999 ABB

| BUS 275 Principles of Management | 3 |
| BUS Business Electives | 9 |

**Total Minor Requirements** 12

**Minor Requirements**

**Welding** 309999 ABW

| WDT 108 SMAW Fillet/OFC | 3 |
| WDT 109 SMAW Fillet/PAC/CAC | 3 |
| WDT 122 SMAW Fillet/OFC Lab | 3 |
| WDT 123 SMAW Fillet/PAC/CAC/Lab | 3 |

**Total Minor Requirements** 12

**Auto Mechanics** 309999 ABA

| AUM 101 Fundamentals of Automotive Technology | 3 |
| AUM 112 Electrical Fundamentals | 3 |
| AUM 121 Braking Systems | 3 |
| AUM Elective | 3 |

**Total Minor Requirements** 12

**General Requirements** 19

**Total Requirements for AOT Degree** 73

*Computer competency skills are embedded within one or more courses required in this curriculum.

**Automotive Collision Repair** 470603 ABR

**Career Certificate**

Available: Shoals Campus

Advisors: E. Reid (5231) ereid@nwssc.edu
J. Hackworth (5335) joehackworth@nwssc.edu

Automotive collision repair has expanded throughout the country to become a major field of automotive work. Repairing damages and restoring the original beauty of an automobile requires the work of a master craftsman. Working conditions and employment opportunities are excellent and will continue to grow.

This Automotive Collision Repair program is designed to train students to repair an automobile correctly, economically, and safely. The program includes technology, welding, mathematics, shop safety, metal straightening, panel replacement, interior trim and body refinishing, auto electricity, glass replacement, frame straightening, fiber glass repair, and damage estimations. The student will learn how to become an automobile repair person with skills that include all phases of auto collision repair.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester</th>
<th>COM 100 Introductory Technical Theory Lab Hours</th>
<th></th>
</tr>
</thead>
</table>

Northwest-Shoals Community College 2015-2016
One page of a document, containing text about the importance of technical manuals, seminars, and classes for continuing repair and glass replacement. It also mentions the use of special equipment for restoring damaged metal frames and the knowledge of materials, installation, and welding in Collision Repair.

The text includes a list of courses offered, such as ABR 223 Automotive Mechanical Components and ABR 224 Automotive Electrical Components. Each course has a credit hour and is part of a program that requires a high school diploma or GED certificate for admission. Students must be at least 16 years old to enroll.

A self-contained short-term certificate for Basic Automotive Collision Repair is also mentioned, which prepares students for careers in automotive collision repairers. The certificate covers areas like structural repair, frame repair, and painted repair, and it is designed to be completed at another institution.

The Automotive Service Technology AOT Degree is available at Shoals Community College, with advisors E. Reid and J. Hackworth. The program prepares students for careers in automotive repair and is open to those who have not completed high school diploma or GED.

Requirements for the Associate in Occupational Technology Degree include courses in Written Composition, English Composition I and/or Technical Writing, Humanities and Fine Arts, and Natural Science and Mathematics. A student must complete a minimum of 3 hours in MTH 116 or MTH 100 or Higher, with an additional 6 hours of degree creditable coursework taken from disciplines such as math, biology, chemistry, physical science, physics, and environmental science.
technology and computer science.

Area IV: History, Social and Behavioral Sciences ........ 3
Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.

Minimum General Requirements ....................................... 19

Major Requirements .................................................. Semester Hours
AUM 101 Fundamentals of Automotive Technology .......... 3
AUM 112 Electrical Fundamentals ............................ 3
AUM 121 Braking Systems ....................................... 3
AUM 122 Steering, Suspension and Alignment .......... 3
AUM 124 Automotive Engines .................................. 3
AUM 130 Drive Train and Axles ............................... 3
AUM 133 Motor Vehicle Air Conditioning .......... 3
AUM 162 Electrical and Electronic Systems ............ 3
AUM 224 Manual Transmission and Transaxle .......... 3
AUM 230 Auto Transmission and Transaxle ........... 3
AUM 239 Engine Performance ............................... 3
AUM 244 Engine Performance and Diagnostics .... 3
AUM 246 Automotive Emissions ........ 3
AUM Electives ................................................... 6
Total Major Requirements ............................................. 45

Minor Requirements

Auto Collision Repair ............................................. 309999 AUR
ABR 111 Non-Structural Repair ................................. 3
ABR 114 Non-Structural Panel Replacement .......... 3
ABR 122 Surface Preparation .................................. 3
ABR Elective ....................................................... 3
Total Minor Requirements ......................................... 12

Minor Requirements

Machine Shop .......................................................... 309999 AMT
MSP 101 Basic Machining Technology .................... 5
MSP 102 Intermediate Machining Technology ........ 5
MSP 121 Basic Blueprint Reading for Machinists .... 2
Total Minor Requirements ......................................... 12

General Requirements .................................................. 19

Total Requirements for AOT Degree .......................... 76

*Computer competency skills are embedded within one or more courses required in this curriculum.

Automotive Service Technology 470604 AST

Career Certificate

Available: Shoals Campus
Advisors: A. Austin (5449) austin@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

The Automotive Service Technology program offers students a curriculum that reflects current industry standards. The curriculum will provide students with the necessary experiences, including knowledge of all automatic systems, tools, and equipment, as well as proper troubleshooting and repair techniques, to become enjoyable in the automatic repair industry.

The Automotive Service Technology program will provide students the knowledge of workplace hazards so students will be able to work safely in the automatic industry, and will strive to instill in students a professional work ethic so that employers will have the personnel who have the character quality and soft skills to meet their needs.

Entering students are required to complete ORI 107.

Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th></th>
<th>Theory</th>
<th>Lab</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English I</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>AUM 101 Fundamentals of Automotive Technology</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 112 Electrical Fundamentals</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 121 Braking Systems</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AUM 122 Steering, Suspension and Alignment</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 124 Automotive Engines</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 130 Drive Train and Axles</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 133 Motor Vehicle Air Conditioning</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 162 Electrical and Electronic Systems</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 182 Special Topics</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>AUM 212 Advanced Electrical and Electronic Systems</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 220 Advanced Automotive Engines</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 224 Manual Transmission and Transaxle</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 230 Auto Transmission and Transaxle</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 239 Engine Performance</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 244 Engine Performance and Diagnostics</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 246 Automotive Emissions</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ................................. 54

*Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another school.

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll. must be at least 16 years of age to enroll.

Basic Automotive Service Technology 470604 AUM

Short-Term Certificate

Available: Shoals Campus
Advisors: A. Austin (5449) aaustin@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

This short-term certificate is designed to prepare students for employment in the automotive service industry. Emphasis is placed upon developing competency in diagnosing problems, inspecting, maintaining and repairing automobiles and light trucks. The increasing sophistication of automotive technology now requires workers who can use computerized shop equipment and work with electronic components, while maintaining their skills with traditional handtools.

Basic scientific principles and technical information are taught to give the student a better understanding of the cause of mechanical and electrical failures. The successful student will become skilled in making scientific diagnosis and performing necessary repairs and adjustments to the various systems of the automobile. Employers look for people with
strong communication and analytical skills. Good reading, mathematics, and computer skills are needed to study technical manuals and keep abreast of new technology.

Graduates of Basic Auto Mechanics will be prepared to enter the automotive service industry as an entry level automotive technician.

This short-term certificate does not require a high school diploma or a GED certificate for admission. Students must be at least 16 years of age to enroll.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUM 101</td>
<td>Fundamentals of Automotive Technology</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 112</td>
<td>Electrical Fundamentals</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 121</td>
<td>Braking Systems</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 122</td>
<td>Steering, Suspension and Alignment</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 124</td>
<td>Automotive Engines</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 130</td>
<td>Drive Train and Axles</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 133</td>
<td>Motor Vehicle Air Conditioning</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 162</td>
<td>Electrical and Electronic Systems</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ........................................... 25

*Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another school.

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.

### Basic Carpenter 460201 BC Short-Term Certificate

**Available:** Shoals Campus  
**Advisors:** J. Hackworth 5335) [johackworth@nwsc.edu](mailto:johackworth@nwsc.edu)

This short-term certificate is designed to prepare students with carpentry skills and related technical knowledge needed for immediate employment in the carpentry profession. Emphasis is placed on safety, employability skills, and requirements for successful employment. Students learn to work from blueprints and instructions, preparing a layout by measuring, marking, and arranging materials. Hand and power tools are used to cut and shape various materials. The materials are joined with nails, screws, staples, or adhesives.

Carpenters may be involved in various kinds of construction activity, maintenance and installation work, repair work, manufacturing firms, government agencies, wholesale and retail establishments, and schools. Many carpenters are self-employed. It is important to acquire skills in all aspects of carpentry and to have flexibility to perform any kind of carpentry work.

Skilled carpenters need manual dexterity, eye-hand coordination, physical fitness, and a good sense of balance. Carpenters must be able to estimate how long a job should take to complete and its cost.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB 101</td>
<td>Introduction to Cabinetmaking</td>
<td>1</td>
<td>4</td>
<td>3</td>
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<tr>
<td>CAB 102</td>
<td>Introduction to Lumber</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CAB 103</td>
<td>Sizes and Dimensions</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CAB 104</td>
<td>Cabinet Shop Operations</td>
<td>3</td>
<td>0</td>
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<tr>
<td>CAB 110</td>
<td>Basic Safety Tools and Equipment</td>
<td>1</td>
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</tr>
<tr>
<td>CAB 141</td>
<td>Woodfinishing</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>CAB 204</td>
<td>Cabinetmaking/Millwork</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ........................................... 22
Electrical Technology 460302 ELT Career Certificate

Available: Shoals Campus
Advisors: R. Morris (5244) raymorris@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

The increased use of electricity and society’s dependence upon it has created a vast number of occupational opportunities for the trained electrical technician. Great strides have been made in every line of electrical development. The increased use of automation in industrial plants has increased the need for trained industrial electricians. The Electrical Technology Program is designed to fulfill the needs of a demanding industry. The course includes electrical fundamentals, equipment and machine installation, maintenance and troubleshooting of motors, transformers and industrial controls, wiring methods, modern control methods, hydraulic, pneumatic, and electro-mechanical systems. The future brings increased demand for electricians who possess the skills of the trade and a working knowledge of the principles of electricity. The length of the curriculum is 4 semesters full-time day, or full-time night.

All entering students are required to complete ORI 107 unless transferred from another university or college.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>2</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>ELT 108 DC Fundamentals</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ELT 109 AC Fundamentals</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ELT 110 Wiring Methods</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ELT 114 Residential Wiring Methods</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ELT 115 Residential Wiring Methods II</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ELT 117 AC/DC Machines</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>ELT 118 Commercial/Industrial Wiring</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>ELT 122 Advanced AC/DC Machines</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ELT 132 Commercial/Industrial Wiring II</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ELT 241 National Electrical Code</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>ELT 209 Motor Control I</td>
<td>1</td>
<td>6</td>
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<tr>
<td>ELT 212 Motor Control II</td>
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</tr>
<tr>
<td>ELT 231 Programmable Controls I</td>
<td>2</td>
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<td>ELT 232 Programmable Controls II</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ELT 242 Journeyman Master Prep Exam</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ELT 244 Conduit Bending and Installation</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ELT 245 Electrical Grounding Systems</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ........................................58

*Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another institution.
*Contact hours are not shown for electives since they may vary and combine both theory and lab.
*Computer competency skills are embedded within one or more courses required in this curriculum.

An articulation agreement is in place between the College and North Alabama Electrical Joint Apprenticeship and Training Committee (IBEW) to award credit for the electrical training completed through the apprenticeship program at the IBEW as part of an Associate in Occupational Technology (AOT) degree in Electrical Technology. Students will be required to complete 18 hours in general education coursework and 12 hours of minor coursework in an approved minor program. Please contact Joe Hackworth at 256.331.5335 for additional information.

Machine Shop Technology 309999 MWT AOT Degree

Available: Phil Campbell and Shoals Campuses
Advisors: T. Maupin (5247) tmaupin@nwscc.edu
M. Johnson (8047) mjohnson@nwscc.edu
J. Hackworth (5335) joehackworth@nwscc.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

Core Degree Requirements for the Associate in Occupational Technology Degree

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition .............................3</td>
</tr>
<tr>
<td>Area II: Humanities and Fine Arts .......................3</td>
</tr>
<tr>
<td>Area III: Natural Science and Mathematics ..............9</td>
</tr>
<tr>
<td>Area IV: History, Social and Behavioral Sciences ..........3</td>
</tr>
<tr>
<td>Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.</td>
</tr>
<tr>
<td>Minimum General Requirements ............................19</td>
</tr>
<tr>
<td>Major Requirements ................................. Semester Hours</td>
</tr>
<tr>
<td>MSP 101 Basic Machining Technology .......................5</td>
</tr>
<tr>
<td>MSP 102 Intermediate Machining Technology ................5</td>
</tr>
<tr>
<td>MSP 103 Advanced Machining Technology ....................5</td>
</tr>
<tr>
<td>MSP 104 Basic Machining Calculations ......................2</td>
</tr>
<tr>
<td>MSP 105 Lathes ........................................3</td>
</tr>
<tr>
<td>MSP 107 Milling Machines ................................3</td>
</tr>
<tr>
<td>MSP 115 Advanced Milling Machines .......................5</td>
</tr>
<tr>
<td>MSP 121 Basic Blueprint Reading for Machinists ..........2</td>
</tr>
<tr>
<td>MSP 131 Introduction to Metrology ........................2</td>
</tr>
<tr>
<td>MSP 142 Advanced Machining Calculations ..................2</td>
</tr>
<tr>
<td>MSP 181 Special Topics ...................................2</td>
</tr>
<tr>
<td>MSP 221 Advanced Blueprint Reading ........................2</td>
</tr>
<tr>
<td>MSP Electives ...........................................7</td>
</tr>
<tr>
<td>Total Major Requirements ................................45</td>
</tr>
</tbody>
</table>
| Minor Requirements ...........................................

Welding

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 108 SAW Fillet/OFC ..................................3</td>
</tr>
<tr>
<td>WDT 109 SAW Fillet/PAC ..................................3</td>
</tr>
<tr>
<td>WDT 122 SAW Fillet/OFC Lab .............................3</td>
</tr>
<tr>
<td>WDT 123 SAW Fillet/PAC Lab ................................3</td>
</tr>
<tr>
<td>Total Minor Requirements ..............................12</td>
</tr>
<tr>
<td>General Requirements .................................19</td>
</tr>
<tr>
<td>Total Requirements for AOT Degree ......................76</td>
</tr>
</tbody>
</table>
**Minor Requirements**

**Air Conditioning/Refrigeration Technology**
- ACR 111 Refrigeration Principles ...........................................3
- ACR 112 HVACR Service Procedures ...........................................3
- ACR 132 Residential Air Conditioning (or ELT 109) ......................3
- ACR 209 Commercial Air Conditioning Systems ............................3

**Total Minor Requirements .................................................12**

**General Requirements ................................................19**

**Total Requirements for AOT Degree ................................76**

*Computer competency skills are embedded within one or more courses required in this curriculum.

**Advanced Automotive Service Technology**

**470604 AAS Short-Term Certificate**

Available: Shoals Campus

Advisors: A. Austin (5449) austin@nwssc.edu
          J. Hackworth (5335) jehackworth@nwssc.edu

This short-term certificate prepares students to use electronic service equipment and investigate the areas of specialization. A more intensive career preparation is provided through a combination of classroom instruction and hands-on practice. Curriculum is updated frequently to reflect changing technology and equipment. Knowledge of the basic principles of electronics and electrical systems is included in the program design for automotive service technicians. Successful graduates may become certified by Automotive Service Excellence (ASE) in specific service areas after 2 years of experience and passing a written examination. Completion of an automotive mechanic program in high school, vocational or community college may substitute for 1 year of experience.

Completion of Basic Auto Mechanics is recommended prior to enrollment in Advanced Auto Mechanics. A high school diploma or GED is not required for admission to this program. Students must be at least 16 years of age to enroll.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Theory</th>
<th>Lab</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUM 212 Advanced Electrical and Electronics Systems</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 220 Advanced Automotive Engines</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 224 Manual Transmission &amp; Transaxle</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 230 Auto Transmission &amp; Transaxle</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 239 Engine Performance and Diagnostics</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 244 Engine Performance and Diagnostics</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 246 Automotive Emissions</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AUM 281 Special Topics</td>
<td>0</td>
<td>3</td>
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</tbody>
</table>

**Total Semester Credit Hours ........................................25**

*Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another school.

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.**

---

**Carpentry/Cabinetmaking**

**AOT Degree**

Available: Shoals Campus

Advisors: J. Hackworth (5335) jehackworth@nwssc.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

**Core Degree Requirements for the Associate in Occupational Technology Degree**

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

| Area I: Written Composition ..................................3 |
| Area II: Humanities and Fine Arts ...........................3 |
| Area III: Natural Science and Mathematics .................9 |
| Area IV: History, Social and Behavioral Sciences ..........3 |

A minimum of 3 hours in MTH 116 or MTH 100 or Higher is required. The additional 6 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physical science, physics, environmental technology and computer science.

**Minimum General Requirements ........................................19**

**Semester Hours**

| Major Requirements ..............................................3 |
| CAB 101 Introduction to Cabinetmaking .......................3 |
| CAB 104 Cabinet Shop Operation ................................3 |
| CAB 141 Wood Finishing ........................................5 |
| CAB 204 Cabinetmaking/Millwork ................................5 |
| CAB 230 Estimating Costs in Cabinetmaking ..................2 |
| CAR 112 Floors, Walls, Site Prep ..............................3 |
| CAR 113 Floors, Walls, Site Prep Lab .........................3 |
| CAR 121 Introduction to Blueprint ............................3 |
| CAR 131 Roof and Ceiling Systems ............................3 |
| CAR 133 Roof and Ceiling Systems Lab ........................3 |
| CAR 232 Construction Project Management ....................3 |
| CAR 228 Stairs, Molding and Frame ...........................3 |
| CAR/CAB Electives ..............................................6 |

**Total Major Requirements ............................................45**

**Minor Requirements**

**Business Management and Supervision** 309999 CBU

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 275 Principles of Management ..........................3</td>
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<tr>
<td>BUS Electives ..............................................9</td>
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</table>

**Total Minor Requirements ........................................12**

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Northwest-Shoals Community College 2015-2016
Minor Requirements

Welding 309999 CCW
WDT 108 SMAW Fillet/OFC ........................................... 3
WDT 109 SMAW Fillet/PAC/CAC .................................... 3
WDT 122 SMAW Fillet/OFC Lab ..................................... 3
WDT 123 SMAW Fillet/PAC/CAC Lab ................................ 3
Total Minor Requirements ........................................... 12

General Requirements .............................................. 19
Total Requirements for AOT Degree ......................... 76

*C*Computer competency skills are embedded within one or more courses required in this curriculum.

---

**Carpentry/Cabinetmaking** 460201 CAR

Carpentry/Cabinetmaking, using wood for construction and repair, has been an important craft for centuries. These skills are so important and versatile that they make up the largest group of building trade workers.

Students are exposed to various areas of carpentry/cabinetmaking such as safety, hand tools, blueprint reading, metric measures, stair construction, floor framing, wall and ceiling framing, exterior finish and various types of cabinet building.

Emphasis is placed on learning the true value of good craftsmanship and how to apply this knowledge to benefit the employee and employer. One of the main objectives of the program is to develop the skills, attitudes and ethics needed to become successfully employed.

**Entering students are required to complete ORI 107.**

Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CAB 101 Introduction to Cabinetmaking</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CAB 102 Introduction to Lumber</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CAB 103 Sizes and Dimensions</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CAB 104 Cabinet Shop Operations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CAB 110 Basic Safety and Equipment</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CAB 141 Woodfinishing</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>CAB 204 Cabinetmaking/Millwork</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CAB 230 Estimating Costs in Cabinetmaking or CAR 132 Interior and Exterior Finish</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CAR 111 Construction Basics or CAR 232 Construction Project Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CAR 112 Floors, Walls, Site Prep</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CAR 113 Floors, Walls, Site Prep Lab</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>CAR 121 Introduction to Blueprint</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CAR 131 Roof and Ceiling Systems</td>
<td>3</td>
<td>0</td>
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<tr>
<td>CAR 133 Roof and Ceiling Systems Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>CAR 226 Metal Framing</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ....................................... 55

*A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.

**Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another institution.
Cosmetology Instructor Training Short-Term Certificate

Available: Shoals Campus
Advisors: C. Bankston (5265) bankstonc@nwscc.edu
        M. Grissom (5420) melinda.grissom@nwscc.edu
        J. Hackworth (5335) johackworth@nwscc.edu

Cosmetology Instructor training is a teacher training program for licensed managing nails or estheticians. The student is introduced to curriculum development principles and methods of teaching through independent study. The courses include application of learning principles, methods, and techniques in a classroom and laboratory environment. Required record keeping, classroom management, and methods of evaluation are included in this short-term certificate.

The full time program consists of two semesters. The part time program consists of four semesters. After completion of the prescribed curriculum, the student is eligible to take the Alabama state exam for an instructor’s license. Completed courses and hours are transferable to other states for licensing.

Requirements for admission:
• Application with Northwest-Shoals Community College
• Interview with Cosmetology Instructor
• Student must have current Managing Nails or Estheticians License
• Student must meet Alabama Board of Cosmetology requirements
• Student instructors will furnish their books and materials necessary for the course
• Associate Degree or higher is required

Entering students are required to complete ORI 100. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Theory</th>
<th>Lab</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 211 Teaching and Curriculum Development</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIT 212 Teacher Mentorship</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>CIT 213 Lesson Plan Development</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIT 214 Lesson Plan Methods and Development</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CIT 221 Lesson Plan Implementation</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>CIT 222 Instructional Materials and Methods</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CIT 223 Instructional Materials and Methods Applications</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>CIT 224 Special Topics in Cosmetology Instruction</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Credit Hours 24

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Electrical Technology AOT Degree

Available: Shoals Campus
Advisors: R. Morris (5244) raymorris@nwscc.edu
        J. Hackworth (5335) johackworth@nwscc.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

Core Degree Requirements for the Associate in Occupational Technology Degree

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Written Composition ................................................. 3</td>
</tr>
<tr>
<td></td>
<td>English Composition I and/or Technical Writing .................. 3</td>
</tr>
<tr>
<td>II</td>
<td>Humanities and Fine Arts ............................................ 3</td>
</tr>
<tr>
<td>III</td>
<td>Natural Science and Mathematics ................................... 9</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 hours in MTH 116 or MTH 100 or Higher is required. The additional 6 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physics, science, and computer science.</td>
</tr>
<tr>
<td>IV</td>
<td>History, Social and Behavioral Sciences ......................... 3</td>
</tr>
</tbody>
</table>

Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.

<table>
<thead>
<tr>
<th>Minimum General Requirements</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements</td>
<td>45</td>
</tr>
<tr>
<td>Minor Requirements</td>
<td>12</td>
</tr>
</tbody>
</table>

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Northwest-Shoals Community College 2015-2016
Machine Shop/ 480503 MSP
Computer Numerical Control (CNC)
Career Certificate

Available: Phil Campbell and Shoals Campuses
Advisors: T. Maupin (5247) tmaupin@nwscc.edu
M. Johnson (8047) mjjohnson@nwscc.edu
D. Vandiver (5247) dvandiver@nwscc.edu
J. Hackworth (5335) johackworth@nwscc.edu

This certificate is designed to prepare students to enter the machine tool industry. Students entering this plan should have good manual dexterity to operate equipment, spatial comprehension, and math skills to interpret part shape and size from blueprints and a good mechanical aptitude. No high school diploma or GED is required, but students must be at least 16 years of age to enroll. Students without GED’s are encouraged to use the College facilities to obtain a diploma while in the program.

The five-semester day plan (nine semester extended plan) exposes the student to most machine shop equipment. The student will operate drills, lathes, milling machines, and grinders. During the fourth semester, the student has the opportunity to learn the basics of CNC (Computer Numerical Control) programming, setup, and operation. An extensive study of CAM (Computer Aided Machining) is available through an elective course.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Theory</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English I or ENG 101 English Composition I</td>
<td>3</td>
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<tr>
<td>MTH 116 Mathematical Applications</td>
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<tr>
<td>or MTH 100 Intermediate College Algebra</td>
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<tr>
<td>or MTH 100 Intermediate College</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MSP 101 Basic Machining Technology</td>
<td>1</td>
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<tr>
<td>MSP 102 Intermediate Machining Technology</td>
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<tr>
<td>MSP 103 Adv. Machining Technology</td>
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<tr>
<td>MSP 104 Basic Machining Calculations</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>MSP 105 Lathes</td>
<td>1</td>
<td>6</td>
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<tr>
<td>MSP 107 Milling Machines</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>MSP 111 Introduction to Computer Numerical Control</td>
<td>1</td>
<td>3</td>
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<tr>
<td>MSP 112 Basic CNC Turning</td>
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<td>6</td>
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<tr>
<td>MSP 113 Basic CNC Milling</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>MSP 115 Advanced Milling Machines</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>MSP 121 Basic Blueprint Reading for Machinists</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>MSP 127 CAM</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>MSP 131 Introduction to Metrology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>MSP 142 Adv. Machining Calculations</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>MSP 181 Special Topics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>MSP 221 Advanced Blueprint Reading</td>
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<td>3</td>
</tr>
<tr>
<td>MSP Elective X</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Credit Hours .................................. 60

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.**

*** Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another institution.

Welding
AOT Degree

Available: Phil Hackworth (5335) johackworth@nwscc.edu
Advisors: J. Hackworth (5335) johackworth@nwscc.edu
L. Liles (5254/8072) lliles@nwscc.edu
B. Keeton (6389) bkeeton@nwscc.edu

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

Core Degree Requirements for the Associate in Occupational Technology Degree

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Theory</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area I: Written Composition .................................. 3</td>
<td></td>
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<tr>
<td>Area II: Humanities and Fine Arts .......................... 3</td>
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<td>Area III: Natural Science and Mathematics .............. 9</td>
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<tr>
<td>Area IV: History, Social and Behavioral Sciences ....... 3</td>
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</tr>
</tbody>
</table>

Minimum General Requirements ................................ 18

Major Requirements ............................................. Semester Hours
| WDT 108 SAW Fillet/OFC | 3 |
| WDT 109 SAW Fillet/CAC | 3 |
| WDT 110 Industrial Blueprint Reading .......................... 3 |
| WDT 115 GTAW Carbon Pipe ..................................... 3 |
| WDT 119 Gas Metal Arc/Flux Cored Arc Welding ............. 3 |
| WDT 120 Shielded Metal Arc Welding Groove .................. 3 |
| WDT 122 SAW Fillet/OFC Lab .................................. 3 |
| WDT 123 SAW Fillet/PAC/CAC Lab ................................ 3 |
| WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab .......... 3 |
| WDT 125 Shielded Metal Arc Welding Groove Lab ............. 3 |
| WDT 155 GTAW Carbon Pipe Lab ................................ 3 |
| WDT 217 SAW Carbon Pipe ...................................... 3 |
| WDT 228 Gas Tungsten Arc Welding Theory ................... 3 |
| WDT 257 SAW Carbon Pipe Lab .................................. 3 |
| WDT 268 Gas Tungsten Arc Lab .................................. 3 |

Total Major Requirements ........................................ 45

Northwest-Shoals Community College 2015-2016
**Minor Requirements**

**Machine Shop Technology** 309999 WMS
MSP 101 Basic Machining Technology ........................................5
MSP 102 Intermediate Machining Technology .............................5
MSP 121 Basic Blueprint Reading for Machinists .........................2
**Total Minor Requirements** ..................................................12

**Minor Requirements**

**Air Conditioning/Refrigeration Technology** 309999 WAC
ACR 111 Refrigeration Principles .............................................3
ACR 112 HVACR Service Procedures ........................................3
ACR 132 Residential Air Conditioning ........................................3
ACR 209 Commercial Air Conditioning Systems .........................3
**Total Minor Requirements** ..................................................12

**Minor Requirements**

**Automotive Service Technology** 309999 AUT
AUM 133 Motor Vehicle Air Conditioning ..................................3
AUM 101 Fundamentals of Automotive Technology .......................3
AUM 121 Braking Systems .......................................................3
AUM 112 Electrical Fundamentals .........................................3
**Total Minor Requirements** ..................................................12

**Minor Requirements**

**Carpentry Technology** 309999 WCR
CAR 121 Introduction to Blueprint Reading ...............................3
CAR 123 Interior and Exterior Finish ........................................3
CAR 228 Stairs, Moldings, and Trim .......................................3
**Total Minor Requirements** ..................................................12

**General Requirements** .....................................................19

**Total Requirements for AOT Degree** .................................75

*Computer competency skills are embedded within one or more courses required in this curriculum.

---

**Welding** 480508 WEL

**Career Certificate**

Available: Phil Campbell and Shoals Campuses
Advisor: L. Liles (5254/8827) lilies@nwssc.edu
          B. Keeton (6389) bkeeton@nwssc.edu
          J. Hackworth (5335) joehackworth@nwssc.edu

This certificate is designed to develop the skills necessary to enter and maintain a job in the welding field. Students should develop the skills necessary to pass a certification test that meets the requirements of the American Welding Society (AWS) D1.1 code. Applicants are not required to have completed any particular subject prior to enrollment. Welders need to have good eye-hand coordination, and they need to be in good physical condition. Welding is used in fabrication shops, construction, maintenance, ship building, aircraft, automotive, electrical, and machine shops. Welding is a tool of all trades. The welding field is rapidly expanding, requiring a continually increasing volume of technical knowledge and skills on the part of the operator.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Theory</th>
<th>Lab</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100 Introductory Technical English</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>WDT 108 SMAW Fillet/OFC</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WDT 109 SMAW Fillet/PAC/CAC</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WDT 110 Industrial Blueprint Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>WDT 115 GTAW Carbon Pipe Theory</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>WDT 119 Gas Metal Arc/Flux Cored Arc Welding Theory</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WDT 120 Shielded Metal Arc Welding Groove Theory</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WDT 122 SMAW Fillet/OFC Lab</td>
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</tr>
<tr>
<td>WDT 123 SMAW Fillet/PAC/CAC Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WDT 125 Shielded Metal Arc Welding Groove Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WDT 155 GTAW Carbon Pipe Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WDT 217 SMAW Carbon Pipe Theory</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>WDT 219 Welding Inspection and Testing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>WDT 228 Gas Tungsten Arc Welding Theory</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WDT 257 SMAW Carbon Pipe Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WDT 268 Gas Tungsten Arc Lab</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credit Hours** ...........................................55

**Transfer Credit:** Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another institution.

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.**

Northwest-Shoals Community College  2015-2016
Basic Welding Technology 480508 WDT
Short-Term Certificate

Available: Phil Campbell and Shoals Campuses
Advisors: L. Liles (5254/8072) lilies@nwscc.edu
          B. Keeton (6389) bkeeton@nwscc.edu
          J. Hackworth (5335) johackworth@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided with technical knowledge and job specific skills that enable them to compete favorably in the welding field.

Opportunities for welders exist in the business services industry, manufacturing, repair and production work, construction, machinery maintenance, wholesale trade, and automotive vehicle industry.

Welders need good eyesight, good eye-hand coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods of time and be able to bend, stoop, and work in awkward positions. Welders need to be adaptable to receive cross-training for other production jobs.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Lab</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 108 SAW Fillet/OFC</td>
<td>2 3 3</td>
<td></td>
</tr>
<tr>
<td>WDT 109 SAW Fillet/PAC/CAC</td>
<td>2 3 3</td>
<td></td>
</tr>
<tr>
<td>WDT 110 Industrial Blueprint Reading</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>WDT 119 Gas Metal Arc/Flux Cored Arc Welding Theory</td>
<td>2 3 3</td>
<td></td>
</tr>
<tr>
<td>WDT 122 SAW Fillet/OFC Lab</td>
<td>0 9 3</td>
<td></td>
</tr>
<tr>
<td>WDT 123 SAW Fillet/PAC/CAC Lab</td>
<td>0 9 3</td>
<td></td>
</tr>
<tr>
<td>WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab</td>
<td>0 9 3</td>
<td></td>
</tr>
<tr>
<td>WDT 219 Welding Inspection and Testing</td>
<td>3 0 3</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Credit Hours ........................................25

**Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework.

Welding 480508 WBS
Basic SMAW (Stick) Short-Term Certificate

Available: Phil Campbell and Shoals Campuses
Advisors: J. Hackworth (5335) johackworth@nwscc.edu
          L. Liles (5254/8072) lilies@nwscc.edu
          B. Keeton (6389) bkeeton@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided with technical knowledge and job specific skills that enable them to compare automotive vehicle industry.

Welders need good eyesight, good eye-hand coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods of time and be able to bend, stoop, and work in awkward positions. Welders need to be adaptable to receive cross-training for other production jobs.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 108 SMAW Fillet/OFC ........................................3</td>
</tr>
<tr>
<td>WDT 109 SMAW Fillet/PAC/CAC ....................................3</td>
</tr>
<tr>
<td>WDT 122 SMAW Fillet/OFC Lab ....................................3</td>
</tr>
<tr>
<td>WDT 123 SMAW Fillet/PAC/CAC Lab ................................3</td>
</tr>
<tr>
<td>Total Semester Credit Hours .....................................12</td>
</tr>
</tbody>
</table>

FCAW/GMAW (MIG/flux Cored) 480508 WFG
Short-Term Certificate

Available: Phil Campbell and Shoals Campuses
Advisors: J. Hackworth (5335) johackworth@nwscc.edu
          L. Liles (5254/8072) lilies@nwscc.edu
          B. Keeton (6389) bkeeton@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided with technical knowledge and job specific skills that enable them to compare automotive vehicle industry.

Welders need good eyesight, good eye-hand coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods of time and be able to bend, stoop, and work in awkward positions. Welders need to be adaptable to receive cross-training for other production jobs.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 110 Industrial Blueprint Reading ..........................3</td>
</tr>
<tr>
<td>WDT 119 Gas Metal Arc/Flux Cored Arc Welding Theory ........3</td>
</tr>
<tr>
<td>WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab ............3</td>
</tr>
<tr>
<td>WDT 219 Welding Inspection &amp; Testing ..........................3</td>
</tr>
<tr>
<td>Total Semester Credit Hours .....................................12</td>
</tr>
</tbody>
</table>
Welding 480508 WPP

**GTAW Plate and Pipe (TIG)**

**Short-Term Certificate**

Available: Phil Campbell and Shoals Campuses
Advisors:  J. Hackworth (5335)乔 hackworth@nwscc.edu
L. Liles (5254/8072) lliles@nwscc.edu
B. Keeton (6389) bkeeton@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided with technical knowledge and job specific skills that enable them to compare automotive vehicle industry.

Welders need good eyesight, good eye-hand coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods of time and be able to bend, stoop, and work in awkward positions. Welders need to be adaptable to receive cross-training for other production jobs.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 115 GTAW Carbon Pipe Theory .................................. 3</td>
</tr>
<tr>
<td>WDT 155 GTAW Carbon Pipe Lab .................................... 3</td>
</tr>
<tr>
<td>WDT 228 Gas Tungsten Arc Welding Theory ...................... 3</td>
</tr>
<tr>
<td>WDT 268 Gas Tungsten Arc Lab ..................................... 3</td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong> ................................... 12</td>
</tr>
</tbody>
</table>

Welding 480508 WGP

**SMAW Groove and Pipe (STICK)**

**Short-Term Certificate**

Available: Phil Campbell and Shoals Campuses
Advisors:  J. Hackworth (5335)乔 hackworth@nwscc.edu
L. Liles (5254/8072) lliles@nwscc.edu
B. Keeton (6389) bkeeton@nwscc.edu

This short-term certificate is designed to prepare students for immediate employment. Students are provided with technical knowledge and job specific skills that enable them to compare automotive vehicle industry.

Welders need good eyesight, good eye-hand coordination, and manual dexterity. They should be able to concentrate on detailed work for long periods of time and be able to bend, stoop, and work in awkward positions. Welders need to be adaptable to receive cross-training for other production jobs.

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDT 120 Shielded Metal Arc Welding Groove Theory .................. 3</td>
</tr>
<tr>
<td>WDT 125 Shielded Metal Arc Welding Groove Lab .................... 3</td>
</tr>
<tr>
<td>WDT 217 SMAW Carbon Pipe Theory .................................... 3</td>
</tr>
<tr>
<td>WDT 257 SMAW Carbon Pipe Lab ..................................... 3</td>
</tr>
<tr>
<td><strong>Total Semester Credit Hours</strong> ................................... 12</td>
</tr>
</tbody>
</table>
Allied Health Linkage Programs

Northwest-Shoals Community College has established a cooperative linkage program with Wallace State/Hanceville. The first year of general education and prerequisite courses are completed at the NW-SCC on either campus. After acceptance to Wallace State and the desired program, students transfer to Wallace State to complete the course work in the specific area along with clinical experiences to obtain an Associate in Applied Science Degree and/or Certificate. The following programs are offered through this arrangement:

**Approximate Length of Study at Health Programs**  
Wallace State Community College

<table>
<thead>
<tr>
<th>Program</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Laboratory Technician</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Dental Assisting</td>
<td>4 semesters</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Diagnostic Imaging (Radiology)</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Diagnostic Medical Sonography</td>
<td>6 semesters</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>5-6 semesters</td>
</tr>
<tr>
<td>Human Services</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Occupational Therapist Assistant</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>5 semesters</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>5 semesters</td>
</tr>
</tbody>
</table>

Linkage students should submit an application for admission to Wallace State College as soon as they begin classes at Northwest-Shoals. Separate applications are required by each program. **June 1 is the deadline for program applications.** Call (256) 352-8031 to request specific program application.

Students interested in pursuing any of the linkage programs should contact a Northwest-Shoals advisor as early as possible. The student is also strongly advised to contact the Wallace State College linkage program director the first semester at Northwest-Shoals to ensure that the proper courses are taken.

Linkage students will be expected to meet the academic standards of Northwest-Shoals. Since admission requirements and course requirements at Wallace State are subject to change, please consult with the linkage coordinator at Wallace State.* Students who complete these programs are awarded the Associate in Applied Science degree from Wallace State. In addition, the Linkage program offers a certificate program for Dental Assisting.

While attending Wallace State, the student will be responsible for tuition, books, cost of background screening and drug testing fee, an Accident Insurance fee and a Malpractice Insurance fee each semester. Malpractice insurance is available through the College at a low cost. Most programs require students to carry health insurance. All students must have evidence of current immunizations and physical exam.

Linkage scholarships are available. **March 1st** is the deadline for application.

*Contact WSCC for current updates that may have been added to a linkage program after the publication of the NW-SCC catalog.

---

**Clinical Laboratory Technician**  
510899 GEL

**Career Degree** - Wallace Linkage

Available: Phil Campbell and Shoals Campuses  
Advisors:  
A. Lyndon (5319/6235) lyndon@nwscc.edu  
W. Rhodes (5458) wrhodes@nwscc.edu  
K. Ricketts (5331) kricketts@nwscc.edu  
B. Smith (5379) bsmith@nwscc.edu  
S. Watson (6253) sberritan@nwscc.edu

Graduates of the Clinical Laboratory Technician Program are employed in hospital laboratories, physicians’ offices, and other laboratory facilities as Clinical Laboratory Technicians (CLT) and Medical Laboratory Technicians (MLT). These graduates are allied-health professionals who perform analyses in the areas of microbiology, hematology, immunology, biochemistry, and immunohematology.

The program provides education and training in these sciences and in the performance of laboratory procedures used in the diagnosis and treatment of diseases and disorders. The Clinical Laboratory Program accepts students twice a year in the summer and fall semesters. The graduate receives an Associate in Applied Science Degree and will be eligible to sit for a National Certification Examination. See program webpage for accreditation information.

**General Required Courses to be Completed at Northwest-Shoals Community College**. It is not mandatory that all General Required Courses be completed before entering the professional phase.

**Entering students are required to complete** ORI 107. Transfer students are exempt from this requirement.

**Semester Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 103 Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHM 104 Introduction to Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
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<tr>
<td>ENG 102 English 102 English Composition II</td>
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<tr>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MTH 116 Mathematical Applications</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective</td>
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</tr>
<tr>
<td>PSY 200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Julie Welch 256.352.8347

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Health programs at Wallace State have program admission requirements unique to the individual program. Information on program admission requirements can be obtained through the WSCC catalog, WSCC website (www.wallacestate.edu), or Wanda Rhodes, Health Linkage advisor located at NW-SCC. Admission requirements may include, but are not limited to CPR certification, ACT scores, Compass testing, and observation hours.

After program admission, all WSCC Health Science Division students are required to submit a physical exam, and to consent to drug testing and criminal background checks to meet clinical agency requirements.
**Dental Assisting**

510899 GEL

**Career Degree - Wallace Linkage**

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwsc.edu
W. Rhodes (5458) wrhodes@nwsc.edu
K. Ricketts (5331) kricketts@nwsc.edu
B. Smith (5379) bsmith@nwsc.edu
S. Watson (6253) sberrian@nwsc.edu

Upon successful completion of this program, graduates will be prepared to function as Dental Assistants in dental offices, hospitals, and clinics. A dental assistant assists with the direct care of patients under the supervision of a dentist. **STUDENTS ENROLLING IN THE PROGRAM MAY DO SO FOR EITHER A CERTIFICATE PROGRAM OR AN ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM.** Either approach enables the student to qualify to take the National Certification Examination administered by the Dental Assisting National Board, Inc. Students are required to complete the program within two years of entry into the program. See program webpage for accreditation information.

**General Required Courses to be completed at Northwest-Shoals Community College.**

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CIS 146 Microcomputer Applications</td>
</tr>
<tr>
<td>3</td>
<td>*ENG 101 English Composition I</td>
</tr>
<tr>
<td>3</td>
<td>*MTH 116 Mathematical Applications</td>
</tr>
<tr>
<td>3</td>
<td>*PSY 200 General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>*SPH 107 Fundamentals of Public Speaking</td>
</tr>
<tr>
<td>3</td>
<td>Humanities/Fine Arts Elective</td>
</tr>
<tr>
<td>3</td>
<td>BIO 103 Principles of Biology I</td>
</tr>
<tr>
<td>4</td>
<td>Total Semester Hours</td>
</tr>
</tbody>
</table>

*Required for certificate program.

Students must complete specialized courses at Wallace State to receive this degree or certificate. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Barbara Ebert 256.352.8380

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**Dental Hygiene**

510899 GEL

**Career Degree - Wallace Linkage**

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwsc.edu
W. Rhodes (5458) wrhodes@nwsc.edu
K. Ricketts (5331) kricketts@nwsc.edu
B. Smith (5379) bsmith@nwsc.edu
S. Watson (6253) sberrian@nwsc.edu

Wallace State Community College offers this course of study leading to an Associate in Applied Science Degree in Dental Hygiene. Individuals who have received a Certificate or A.A.S. in Dental Assisting from an accredited program may receive advanced standing for previously completed courses including DHY 103 (Radiology) and DHY 102 (Dental Materials). The DHY Program requires a minimum of five semesters for completion.

As a practicing member of the dental health team, the dental hygienist acts as an educator and motivator in maintenance of oral health and the prevention of dental disease. There are many professional roles the dental hygienist may assume: participation in community health programs, dental office managerial roles, and participation in research activities. Since many dentists employ one or two dental hygienists, employment opportunities in this field are wide. Hygienists are in demand in general dental practices as well as in specialty practices such as periodontics or pediatric dentistry. Hygienists may also be employed to provide dental hygiene services for patients in hospitals, nursing homes, and public health clinics.

See program website for accreditation information. Graduates are allowed to take National Dental Hygiene Boards. Students who successfully complete the National Board Exam are qualified to take any State or Regional licensing examination.

**General Required Courses to be completed at Northwest-Shoals Community College.**

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>*BIO 201-202 Anatomy and Physiology I and II</td>
</tr>
<tr>
<td>4</td>
<td>*BIO 220 General Microbiology</td>
</tr>
<tr>
<td>4</td>
<td>CHM 104 Introduction to Inorganic Chemistry</td>
</tr>
<tr>
<td>3</td>
<td>ENG 101 English Composition I</td>
</tr>
<tr>
<td>3</td>
<td>MTH 116 Mathematical Application</td>
</tr>
<tr>
<td>3</td>
<td>PSY 200 General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>SPH 107 Fundamentals of Public Speaking</td>
</tr>
<tr>
<td>3</td>
<td>SOC 200 Introduction to Sociology</td>
</tr>
<tr>
<td>3</td>
<td>Humanities or Fine Arts Elective</td>
</tr>
<tr>
<td>35</td>
<td>Total Semester Hours</td>
</tr>
</tbody>
</table>

*Required for certificate program.

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Barbara Ebert 256.352.8380
Diagnostic Imaging 510899 GEL

Career Degree - Wallace Linkage

Available: Phil Campbell and Shoals Campuses
Advisors:  
A. Lyndon (5319/6235) lyndon@nwsc.edu  
W. Rhodes (5458) wrhodes@nwsc.edu  
K. Ricketts (5331) kricketts@nwsc.edu  
B. Smith (5379) bsmith@nwsc.edu  
S. Watson (6253) sberrian@nwsc.edu

This program is designed to provide terminologists for diagnostic imaging departments of hospitals and clinics. Students are taught the fundamental principles underlying all phases of Radiologic Technology. Upon graduation, the student is eligible to take the registry examination of the American Registry of Radiologic Technology. According to the American Registry of Radiologic Technologist, application for certification to practice as a R.T. may be denied if a person has been convicted of a felony, is guilty of a crime involving moral turpitude, and/or has displayed other grounds for denial by law. Students must satisfy general qualifications for certification in accordance with The American Registry of Radiologic Technologists (ARRT) guidelines. See program webpage for accreditation information.

Participation in the performance of radiographic procedures in a clinical setting will begin during the first year of the program. Students enrolled in clinical education will be assigned hours consistent to day shift for the majority of their training; however, assignments will also include 3:00 p.m.-11:00 p.m. shifts. Assignment to clinical facilities will be at the discretion of the program officials, and students are required to travel to different locations during the clinical phase.

The Radiologic Technology Program admits students annually in the fall semester, although general education courses may be taken prior to admission into the program. Program spaces are limited; therefore, students are encouraged to apply early.

Wallace State College will award the Associate in Applied Science Degree upon completion of program requirements. Graduation requirements must be met within three years following entry into the program. A student who withdraws or is dismissed from the program must reapply for admission for the following year’s class. Readmission into the Program will be allowed only one time.

Acceptance to Wallace State College does not guarantee admission to the Diagnostic Imaging Program.

General Required Courses to be completed at Northwest-Shoals Community College.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 101-102 English Composition I and II</strong></td>
<td>6</td>
</tr>
<tr>
<td><em>BIO 201-202 Anatomy and Physiology I and II</em></td>
<td>6</td>
</tr>
<tr>
<td>MTH 100 Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PSY 200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>24</td>
</tr>
</tbody>
</table>

* *Biology 103 highly recommended
**SPH 107 may substitute ENG 102

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Jim Malone 256.352.8309

Diagnostic Medical Sonography 510899 GEL

Career Degree - Wallace Linkage

Available: Phil Campbell and Shoals Campuses
Advisors:  
A. Lyndon (5319/6235) lyndon@nwsc.edu  
W. Rhodes (5458) wrhodes@nwsc.edu  
K. Ricketts (5331) kricketts@nwsc.edu  
B. Smith (5379) bsmith@nwsc.edu  
S. Watson (6253) sberrian@nwsc.edu

This program of study is designed to provide didactic and clinical training in the field of general diagnostic medical sonography (ultrasound). The student will receive training in acoustic principles, instrumentation and safety, abdominal, obstetrical, gynecologic, and superficial sonography.

Sonography is a technologist-dependent imaging field that places great emphasis on "hands-on" training. Clinical education in the DMS Program begins early in the professional phase of training with hours increasing as the program progresses. Graduates of the Program will be eligible to apply for the National Registry Examination by the American Registry of Diagnostic Medical Sonographers and American Registry of Radiologic Technologists for Sonography when registry guidelines have been met. See program webpage for accreditation information.

The Associate in Applied Science Degree Program has a six semester competency-based curriculum that includes practical experience in regional health institutions. Math/Science courses must have been completed within seven years of the date of expected entry into the DMS program. (See sonography advisor for information).

The professional phase of the Sonography Program is four semesters in length and is designed to begin fall semester of each year.

Acceptance to Wallace State College does not guarantee admission to the Sonography Program.

General Required Courses to be completed at Northwest-Shoals Community College.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIO 201 Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Art Elective</td>
<td>3</td>
</tr>
<tr>
<td>MTH 100 Intermediate College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>SPH 107 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>**PHY 115 Technical Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSY 200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>24</td>
</tr>
</tbody>
</table>

* *Biology 103 highly recommended
**MTH 112 recommended

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

Vascular Technology and Echocardiography courses are available for students interested in acquiring specialized skills.

WSCC Program Director: April Sutherland 256.352.8318
HEALTH CARE INFORMATION PROGRAMS

This department offers several unique programs: The Associate in Applied Science degree in Health Information Technology, a certificate in Medical Transcription, and a certificate in Medical Coding.

**Health Information Technology**  510899  GEL Career Degree - Wallace Linkage

Available:  Phil Campbell and Shoals Campuses
Advisors:   A. Lyndon (5319/6235)  lyndon@nwsc.edu
           W. Rhodes (5458)  wrhodes@nwsc.edu
           K. Ricketts (5331)  krickett@nwsc.edu
           B. Smith (5379)  bsmith@nwsc.edu
           S. Watson (6253)  sberrian@nwsc.edu

The Health Information Technician (HIT) is a skilled professional who analyzes and evaluates highly sensitive data in health records. Skills of the health information technician are varied but include the following: supervising the release of health information, maintaining and utilizing information storage and retrieval systems, compiling various health statistics, editing transcribed clinical information, and supervising electronic health information management systems. Health information technicians may be employed by any facility that manages patient information, such as a hospital, clinic, physician office, insurance company, or medical research center.

Health Information Technicians are trained to also become medical coding specialists. The medical coding specialists perform detailed review of medical records to identify diagnoses and operative procedures. Numeric classification codes are assigned to each diagnosis and procedure, using automated or manual methods. Principle classification systems used include the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), and Current Procedural Terminology (CPT).

See program webpage for program accreditation information. Each graduate of the HIT Program is eligible to take the national examination to become a Registered Health Information Technician (RHIT). Technicians trained in non-accredited programs or trained on the job are not eligible to take the examination.

Students have the opportunity to spend many hours in a clinical setting to practice skills obtained in the classroom. Students enrolled in professional practice experience (clinical) courses will be assigned hours consistent with day shift. Assignment to the professional practice experience facilities will be at the discretion of program officials, and students are required to travel to different locations for the “hands-on” training.

The Health Information Technology Program Offers three alternatives for a student's completion of classes: (Note: Actual program completion time may vary).

1. **One year, non-integrated program:** A student who has completed all general education courses may complete the HIT program courses in three semesters of full-time study.

2. **Two year, integrated program:** A student may schedule general education courses while taking the health information technology courses. This alternative requires a minimum of 5 to 6 semesters to complete.

3. **Online Program:** A student may schedule HIT online courses in accordance with either the one year or two year completion option. The professional practice experience activities must be completed on dayshift at an approved health care facility, not online. HIT students who live within 50 miles of campus must attend a minimum number of on-campus class/lab meetings. Instructors may require online students to take make-up exams on campus. Instructors may also require online course exams to be proctored, according to college policy.

4. **Part-time Program:** The student may choose to complete the program by taking classes on a part-time basis. Program completion time will depend upon the number of classes taken each semester. The program must be completed within three years following entry into the program.

Students should indicate on the program application the option that they would like to choose to complete their degree.

**General Courses to be Completed at Northwest-Shoals Community College.**

**Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.**

**Semester Hours**

- BIO 201-202 Human Anatomy and Physiology I and II........................................8
- CIS 146 Microcomputer Applications.................................................................3
- ENG 101 English Composition I and 102 English Composition II or SPH 107 Fundamentals of Public Speaking.................................................................6
- MTH 116 Mathematical Applications........................................................................3
- OAD 211 Medical Terminology...............................................................................3
- Behavior Science Elective or History or Social Science elective or PSY 200 General Psychology.................................................................3
- Humanities/Fine Art Elective....................................................................................3
- **Total Semester Hours.........................................................................................30**

**Biology 103 highly recommended**

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSSC Program Director: Donna Stanley 256.352.8327

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Health programs at Wallace State have program admission requirements unique to the individual program. Information on program admission requirements can be obtained through the WSSC catalog, WSSC website (www.wallacestate.edu), or Wanda Rhodes, Health Linkage advisor located at NW-SCC. Admission requirements may include, but are not limited to CPR certification, ACT scores, Compass testing, and observation hours.

After program admission, all WSSC Health Science Division students are required to submit a physical exam, and to consent to drug testing and criminal background checks to meet clinical agency requirements.
Human Services

Career Degree - Wallace Linkage

510899 GEL

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwsc.edu
W. Rhodes (5458) wrhodes@nwsc.edu
K. Ricketts (5331) krickettes@nwsc.edu
B. Smith (5379) bsmith@nwsc.edu
S. Watson (6253) sberrian@nwsc.edu

The Human Services curriculum is designed for students who wish to pursue a two-year degree and prepare for a paraprofessional career in a mental health/human services related field.

Clinical experience allows the student to gain valuable knowledge in observation and assistance in human services facilities. Students enrolled in clinical education will be assigned hours consistent with day working hours of human services agencies. However, assignments may include second shift hours of 3-11 p.m. Assignment to clinical facilities will be at the discretion of the program director and/or clinical director. Students may be required to travel distances away from their home for their clinical assignment.

The Human Services Program offers three A.A.S. degree options for the student: Mental Health Technician Associate, Alcohol and Drug Associate Counseling Associate, and Social Work Associate. A student may complete one or more of the three options, depending upon which field he/she desires to pursue.

The Mental Health Technician Associate Option is offered every year. The Alcohol and Drug Counseling Associate Option is offered in odd-numbered years and the Social Work Associate Option is offered in even-numbered years.

The Mental Health Associate (sometimes called a Psychiatric Technician, Behavioral Health Technician, Mental Health Technologist, or Counselor Assistant) is trained to work as a paraprofessional in state institutions, mental health centers, psychiatric (behavioral medicine) units of hospitals, domestic violence centers, developmental centers, group homes, halfway houses, and a variety of human services facilities. He/she may work with children, adolescents, and adults who are experiencing mental illness, mental retardation, substance abuse, domestic violence, adjustment disorders (personal loss, stress, and health), various categories of behavior-related pathology, and family issues. Upon completion of the program, a student may voluntarily take the Nationally Certified Psychiatric Technician exam to become a Nationally Certified Psychiatric Technician.

The Alcohol and Drug Counseling Associate option offers special training for students desiring to work with substance abusers and their families. He/she is trained to work in state institutions, mental health centers, profit treatment centers, non-profit treatment centers, 12-step recovery programs, halfway houses, and group homes. With the course work in this program and a minimum of two years of documented work experience in the addictions field, the student may qualify to take the state certification exam to become a “Certified Alcohol and Drug Counselor.”

The Social Work Associate Option trains the student to work as an assistant social worker or assistant case manager. Graduates of this option work at mental health centers, domestic violence shelters, nursing homes, assisted living facilities, developmental centers, state institutions, hospitals, service providers of the Alabama Department of Human Resources, addiction recovery programs, various state and federal government programs, Community Action programs, non-profit assistance programs, child advocacy centers, adolescent programs, adolescent and adult detention centers, and literacy programs. Students are trained to work with individuals at all stages of the human lifespan.

General Required Courses to be Completed at Northwest-Shoals Community College.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 103</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>CIS 146</td>
<td>Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 116</td>
<td>Mathematical Applications</td>
<td>6</td>
</tr>
<tr>
<td>THREE</td>
<td>Core Electives</td>
<td>18</td>
</tr>
<tr>
<td>PSY 200</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 210</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Art Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program every term. See your advisor.

WSSC Program Director: Susan Beck 256.352.8339

Health programs at Wallace State have program admission requirements unique to the individual program. Information on program admission requirements can be obtained through the WSSC catalog, WSSC website (www.wallacestate.edu), or Wanda Rhodes, Health Linkage advisor located at NW-SCC. Admission requirements may include, but are not limited to CPR certification, ACT scores, Compass testing, and observation hours.

After program admission, all WSSC Health Science Division students are required to submit a physical exam, and to consent to drug testing and criminal background checks to meet clinical agency requirements.
**Occupational Therapy Assistant**
510899 GEL

**Career Degree** - Wallace Linkage

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwsc.edu
W. Rhodes (5458) wrhodes@nwsc.edu
K. Ricketts (5331) kricketts@nwsc.edu
B. Smith (5379) bsmith@nwsc.edu
S. Watson (6253) sberrian@nwsc.edu

Under the direction of an Occupational Therapist, the Occupational Therapy Assistant (OTA) assists in evaluating patients and in developing a plan of selected tasks to restore, influence, or enhance performance of individuals whose abilities to cope with daily living tasks are impaired or threatened by developmental deficits, the aging process, physical injury or illness, learning disabilities, or psychological and social disabilities. Occupational Therapy Assistants are employed in general hospitals, rehabilitation centers, nursing homes, home health care agencies, private practices, and other specialized health care settings.

The Occupational Therapy Assistant Program is a two-year course of full-time study.

The certifying agency is the National Board for Certification in Occupational Therapy, Inc. (NBCOT). After successful completion of the NBCOT exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Conviction of a felony may affect a graduate’s ability to sit for the NBCOT certification examination or to attain state licensure. Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. See program webpage for accreditation information.

**General Required Courses to be Completed at Northwest-Shoals Community College.**

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**Semester Hours**

*BIO 201 Human Anatomy and Physiology I………………..4
ENG 101 English Composition I…………………………...3
Humanities/Fine Art Elective…………………………………3
MTH 116 Mathematical Applications…………………………3
OAD 211 Medical Terminology……………………………..3
CIS 146 Microcomputer Applications………………………3
PSY 200 General Psychology…………………………………3
SPH 107 Fundamentals of Public Speaking…………………..3
Total Semester Hours………………………………………..26

*Biology 103 highly recommended

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Alan Kenner 256.352.8333

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**Physical Therapist Assistant**
510899 GEL

**Career Degree** - Wallace Linkage

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwsc.edu
W. Rhodes (5458) wrhodes@nwsc.edu
K. Ricketts (5331) kricketts@nwsc.edu
B. Smith (5379) bsmith@nwsc.edu
S. Watson (6253) sberrian@nwsc.edu

The Physical Therapist Assistant (PTA) is a skilled technical health worker who, under the supervision of a Registered Physical Therapist, assists in patients’ treatment programs. The assistant, following established procedures, carries out a planned patient-care program. Duties of the Physical Therapist Assistant are varied but include rehabilitation of orthopedic, neurological, pediatric, and sports-related problems. Physical Therapist Assistants are employed in general hospitals, rehabilitation centers, nursing homes, home health-care agencies, private practices, and other specialized health-care settings.

The Physical Therapist Assistant Program is a two-year course of study. The student should complete the first year of general education course prerequisites before being eligible to apply to the Physical Therapist Assistant Program. Three semesters are necessary to complete the final year of the program, which begins in the fall semester. The second year classes include technical and clinical experience in a variety of health-care settings where the student performs selected clinical procedures under the supervision of a Physical Therapist or Physical Therapist Assistant.

See program webpage for accreditation information. Graduates will be eligible to apply to sit for the National Licensing Examination for the Physical Therapist Assistant, administered by the Federation of State Boards of Physical Therapy. After successful completion of this exam, the individual will be a Licensed Physical Therapist Assistant.

Acceptance to Wallace State College does not guarantee admission to the Physical Therapist Program.

**General Required Courses to be Completed at Northwest-Shoals Community College.**

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

**Semester Hours**

*BIO 201-202 Human Anatomy and Physiology I and II ………8
ENG 101 English Composition I ……………………………3
**Humanities/Fine Art Elective………………………………3
MTH 100 Intermediate College Algebra…………………………3
OAD 211 Medical Terminology………………………………3
PSY 200 General Psychology…………………………………3
PSY 210 Human Growth and Development………………….3
SPH 107 Fundamentals of Public Speaking…………………..3
Total Semester Hours…………………………………………30

*Biology 103 highly recommended

**Ethics in the Health Science or Spanish is recommended.

*** PTA 120 Intro to Kinesiology - Not required for admission to program, but recommended. Bonus points given to applicant for admission purposes.

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively and only in certain terms. See your advisor.

WSCC Program Director: Alina Adams 256.352.8332
Respiratory Therapy  
510899 GEL
Career Degree - Wallace Linkage

Available: Phil Campbell and Shoals Campuses
Advisors: A. Lyndon (5319/6235) lyndon@nwssc.edu
          W. Rhodes (5458) whodges@nwssc.edu
          K. Ricketts (5331) krickettes@nwssc.edu
          B. Smith (5379) bsmith@nwssc.edu
          S. Watson (6253) sberrian@nwssc.edu

This program is designed to provide training necessary for successful completion of the requirements for the advanced practitioner level as defined by the National Board for Respiratory Care (NBRC). A respiratory therapist is responsible for administering under a physician’s prescription many types of breathing therapeutics and utilizing specialized breathing, aerosol, and humidification equipment. The respiratory therapist works closely with the physician and also directly with the patient in the treatment situation.

The Respiratory Therapy program is accredited by the Commission of Accreditation of Allied Health Education Programs in association with the Committee on Accreditation for Respiratory Care (CoARC). Upon graduation, the student is eligible to take the registry examination of the National Board of Respiratory Care.

General Required Courses to be Completed at Northwest-Shoals Community College.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Semester Hours

*BIO 201-202 Human Anatomy and Physiology I and II.....8
ENG 101 English Composition I and 102 English
Composition II or SPH 107 Fundamentals of Public Speaking.................................................6
MTH 100 Intermediate College Algebra .........................3
PSY 200 General Psychology ......................................3
Humanities/Fine Art Elective........................................3
Total Semester Hours...........................................24

*Biology 103 highly recommended

BIO 201, ENG 101, and MTH 100 must be completed by the June 1 application deadline. The other courses may be completed at Wallace.

Students must complete specialized courses at Wallace State to receive this degree. Wallace State enrolls students in this program competitively beginning in fall semester. See your advisor.

WSCC Program Director: Paul Taylor 256.352.8310
### WSCC Health Division Program Admissions Requirements

#### Program CLT
- **GPA**: 2.5
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: No
- **Observation Hours**: No
- **Program App Required**: No
- **Application Due Date**: April 15 & June 1
- **Program Length**: 5
- **Semester Admittance**: Summer & Fall

#### Program DNT (AAS)(CERT)
- **GPA**: 2.3+
- **Testing Requirements**: ACT - 16
- **Prerequisite Courses**: Recommended
- **Observation Hours**: No
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: (AAS) - 4 (CERT) - 3
- **Semester Admittance**: Fall

#### Program DHY
- **GPA**: 2.5+
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: Recommended
- **Observation Hours**: No
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5
- **Semester Admittance**: Fall

#### Program DI (RAD)
- **GPA**: 2.5+
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: Recommended
- **Observation Hours**: No
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5
- **Semester Admittance**: Fall

#### Program DMS
- **GPA**: *2.5
- **Testing Requirements**: ACT - 19
- **Prerequisite Courses**: Yes
- **Observation Hours**: 4 Hours
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 6
- **Semester Admittance**: Fall

#### Program HIT (AAS)
- **GPA**: *2.5
- **Testing Requirements**: ACT - 17, COMPASS RDG≥80 (3 yrs) or ACT RDG-18 (3 yrs)
- **Prerequisite Courses**: Yes
- **Observation Hours**: No
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5-6
- **Semester Admittance**: Fall
- **Online/Onsite**: Online

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**Program HSM (AAS)**
- **GPA**: 2.5
- **Testing Requirements**: None
- **Prerequisite Courses**: No
- **Observation Hours**: 12 Hours
- **Program App Required**: No
- **Application Due Date**: June 1 - Fall
- **Program Length**: 5
- **Semester Admittance**: Fa, Spr & Sum

**Program OTA**
- **GPA**: *2.5
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: Yes
- **Observation Hours**: 24 Hours/2 Sites
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5
- **Semester Admittance**: Fall

**Program PTA**
- **GPA**: *2.5
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: Yes
- **Observation Hours**: 24 Hours/2 Sites
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5
- **Semester Admittance**: Fall

**Program RPT**
- **GPA**: 2.0+
- **Testing Requirements**: ACT - 18
- **Prerequisite Courses**: BIO 103 & BIO 201 & MTH 100, ENG 101
- **Observation Hours**: No
- **Program App Required**: Yes
- **Application Due Date**: June 1
- **Program Length**: 5
- **Semester Admittance**: Fall
- **Online/Onsite**: Onsite & Hybrid

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+ In addition to the cumulative GPA applicants must have a grade of "C" or higher in prerequisite general required courses to gain points in ranking.

* GPA calculated for program will be on the general required courses ONLY.

**WSCC Program Director: Paul Taylor 256.352.8310**
Course Descriptions
Because the College is a comprehensive community college, it offers a variety of types of courses with various purposes. Many courses are designed for transfer to four-year institutions to fulfill baccalaureate degree requirements. We usually refer to these courses as transfer courses. All courses listed in Associate of Arts degree (A.A.) or Associate in Science degree (A.S.) programs are designed to transfer. All junior and community colleges in Alabama use the same course numbering system and descriptions. As a general rule, Alabama four-year institutions accept these courses for transfer, though each institution has unique requirements.

In order to facilitate the transfer process, students, faculty, and staff have access to the Statewide Articulation Reporting System (STARS) by Internet. STARS is a computerized articulation and transfer planning system designed to inform students who attend Alabama community colleges about degree requirements, course equivalents, and other transfer information pertaining to specific majors at each state funded four-year institution. STARS is an efficient and effective way of providing students, counselors, and educators with accurate information upon which transfer decisions can be made. The STARS database, if used properly, can prevent the loss of course credit hours, can provide direction for the scheduling of course work, and can make the transition from one institution to another easier.

The College also offers courses which are designed primarily to prepare students for employment. Employment-oriented courses in Associate in Applied Science (A.A.S.), Associate in Occupational Technology (A.O.T.), and certificate programs may not transfer to some institutions. Please consult your advisor who can assist you in determining the courses and programs that meet your needs.

Another type of designation important to the College courses is that of “Degree Creditable.” For a course to be degree creditable it must require a high school diploma or a GED certificate for enrollment and be taught at a level that carries certain quality assumptions. All departments which are not degree creditable are identified in the course descriptions by a star (*) after the department code. Only with rare exceptions are these courses transferable for degree purposes.

Numbers at the right of each course title indicate lecture, lab, and credit hours, respectively. For example, 3-2-4 would indicate three hours of lecture and two hours of lab per week for four hours of credit. Course numbers beginning with a zero (0) indicate that the course is a developmental course and as such does not meet graduation requirements in certificate or degree programs. An example is ENG 093.

**Parallel Courses** The following table is provided to help students determine which courses are designed for transfer and which are designed for A.A.S. or A.O.T. degrees or certificates. Many courses developed for A.A.S. or A.O.T. degrees or certificates are not designed for transfer and, therefore, may not be transferable to many universities. In the CIS and OAD departments selected courses may not be planned for transfer. Check course descriptions or with an advisor in those departments for these courses.

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*Not Degree Creditable

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**Accounting Technology (ACT)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**ACT 104 Introduction to Business** 3-0-3
This course acquaints the student with American business as a dynamic process. Topics include the private enterprise system, forms of business ownership, marketing, production factors, personnel, labor, finance, and taxation. Upon completion, the student should be able to discuss and apply the basic business principles.

**ACT 114 Introduction to Accounting** 3-0-3
This course introduces the student to Database resources available for use with the accounting programs. Emphasis is placed on Database and Financial Accounting software packages. Upon completion, students should be able to use computerized Database software.

**ACT 115 Introduction to Accounting Computer Resources** 3-0-3
This course introduces the student to the computer resources available for use with the accounting program. Emphasis is placed on accounting spreadsheets and financial accounting software packages. Upon completion, the student should be able to use the computer resources in the accounting program.

**ACT 141 Fundamentals of Accounting I** 3-0-3
This course provides a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is on financial accounting, including the accounting cycle, and financial statement preparation and analysis. Upon completion, the student should be able to apply basic accounting principles and practices used by service and merchandising enterprises.

**ACT 142 Fundamentals of Accounting II** 3-0-3
PREREQUISITE: ACT 141.
This course is a continuation of ACT 141. In addition to a study of financial accounting, this course emphasizes managerial accounting, with coverage of corporations, statement analysis, introductory cost accounting, and use of accounting information for planning, control and decision making. Upon completion, the student should be able to apply the principles of managerial accounting.

**ACT 246 Microcomputer Accounting** 3-0-3
PREREQUISITE: ACT 141.
This course utilizes the microcomputer in the study of financial accounting principles and practices. Emphasis is placed on the use of software programs for financial accounting applications. Upon completion, the student should be able to use software programs for financial accounting applications.

**ACT 247 Advanced Accounting Applications on the Microcomputer** 3-0-3
PREREQUISITE: Permission of the instructor.
In this course, students use the microcomputer in managerial accounting. Emphasis is on a variety of software programs for managerial accounting applications. Upon completion, the student should be able to use various managerial accounting software programs.

**ACT 249 Payroll Accounting** 3-0-3
PREREQUISITE: ACT 141.
This course focuses on federal, state, and local laws affecting payrolls. Emphasis is on payroll accounting procedures and practices, and on payroll tax reports. Upon completion, the student should be able to apply knowledge of federal, state, and local laws affecting payrolls.

**ACT 253 Individual Income Tax** 3-0-3
PREREQUISITE: ACT 142.
This course focuses on the fundamentals of the federal income tax laws with primary emphasis on those affecting the individual. Emphasis is on gross income determination, adjustments to income, business expenses, itemized deductions, exemption, capital gains/losses, depreciation, and tax credits. Upon completion, the student should be able to apply the fundamentals of the federal income tax laws affecting the individual.

**ACT 256 Cost Accounting** 3-0-3
PREREQUISITE: ACT 141.
This course familiarizes the student with cost accounting principles and techniques. Emphasis is on procedures to provide data for job order and continuous process types of industries, determination of unit costs, and preparation of cost reports. Upon completion, the student should be able to apply cost accounting principles and techniques.

**ACT 262 Directed Studies** 3-0-3
PREREQUISITE: Permission of the instructor.
This course is an independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need.

**Air Conditioning/Refrigeration Technology (ACR)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**ACR 111 Principles of Refrigeration** 1-6-3
This course emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVACR system components, common, and specialty tools for HVACR, and application of the concepts of basic compression refrigeration. Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVACR tools, and maintain components of a basic compression refrigeration system.

**ACR 112 HVACR Service Procedures** 1-6-3
This course covers system performance checks and refrigerant cycle diagnosis. Emphasis is placed on the use of refrigerant recovery/recycle units, industry codes, refrigerant coils, and correct methods of charging and recovering refrigerants. Upon completion, students should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws.
ACR 113 Refrigeration Piping Practices 1-6-3
The course introduces students to the proper installation procedures of refrigerant piping and tubing for the heating, ventilation, air conditioning, and refrigeration industry. This course includes various methods of working with and joining tubing. Upon completion, students should comprehend related terminology, be able to fabricate pipe, tubing, and pipe fittings.

ACR 119 Fundamentals of Gas Heating Systems 1-6-3
This course provides instruction on general service and installation for common gas furnace system components. Upon completion, students will be able to install and service gas furnaces in a wide range of applications.

ACR 120 Fundamentals of Electric Heating Systems 1-6-3
This course covers the fundamentals of electric furnace systems. Emphasis is placed on components, general service procedures, and basic installation. Upon completion, students should be able to install and service electric furnaces, heat pumps, and solar and hydronics systems.

ACR 121 Principles of Electricity for HVACR 1-6-3
This course is designed to provide the student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon completion, students should understand and be able to apply the basic principles of HVACR circuits and circuit components.

ACR 122 HVACR Electrical Circuits 1-6-3
This course introduces the student to electrical circuits and diagrams. Electrical symbols and basic wiring diagrams are constructed in this course. Upon completion, student should understand standard wiring diagrams and symbols and be able to construct various types of electrical circuits.

ACR/ASC 123 HVACR Electrical Components 1-6-3
This course introduces students to electrical components and controls. Emphasis is placed on the operations on motors, relays, contactors, starters, and other HVAC electrical components. Upon completion, students should be able to install electrical components and determine their proper operation.

ACR 126 Commercial Heating Systems 1-6-3
This course covers the theory and application of larger heating systems. Emphasis is place on larger heating systems associated with commercial applications such as gas heaters, boilers, unit heaters, and duct heaters. Upon completion, student should be able to troubleshoot and perform general maintenance on commercial heating systems.

ACR 127 HVACR Electric Motors 1-6-3
This course covers the basic maintenance of electric motors used in HVAC/R systems. Topics include types of motors, motor operations, motor installation, and troubleshooting motors. Upon completion student should be able to install and service HVAC/R electric motors.

ACR 130 Computer Assisted HVACR Troubleshooting 0-2-1
This course focuses on troubleshooting procedures. Emphasis is placed on the proper use of test equipment and machine/electrical malfunctions. Upon completion, student should be able to diagnosis and repair service problems in HVAC equipment.

ACR 132 Residential Air Conditioning 1-6-3
This course introduces students to residential air-conditioning systems. Emphasis is placed on the operation, service, and repair of residential air-conditioning systems. Upon completion, students should be able to service and repair residential air-conditioning systems.

ACR 135 Mechanical/Gas/Safety Codes 3-0-3
This course is to enhance the student knowledge of the Southern Mechanical and Gas Code as well as fire and job safety requirements. Emphasis is placed on code book content and compliance with installation requirements. Upon completion, students should be able to apply code requirements to all work.

ACR 141 Environmental Systems 2-6-4
This course provides students with knowledge and skills of environmental chambers. Topics include theory of the refrigerant components and refrigerant circuits, programmable controllers, electrical pressure and calibration instruments, and places emphasis on safety. Upon course completion, students should be able to apply environmentally-safe practices.

ACR 147 Refrigeration Transition and Recovery Theory 3-0-3
This course is EPA-approved and covers material relating to the requirements necessary for type I, II, and III universal certification. Upon completion, students should be prepared to take the EPA 608 certification examination.

ACR 148 Heat Pump Systems I 1-6-3
Instruction received in this course centers around the basic theory and application of heat pump systems and components. Upon completion, students will be able to install and service heat pumps in a wide variety of applications.

ACR 149 Heat Pump Systems II 1-6-3
This is a continuation course of the basic theory and application of heat pump systems. Topics include the electrical components of heat pumps and their function. Upon completion, student should be able to install and service heat pumps.

ACR 181 Special Topics in Air Conditioning and Refrigeration I 3-0-3
This course provides specialized instruction in various areas related to the air conditioning and refrigeration industry.

ACR 182 Special Topics in Air Conditioning and Refrigeration II 0-6-3
This course provides students with opportunities to experience hands-on application of specialized instruction in various areas related to the air conditioning and refrigeration industry.

ACR 183 Special Topics in Air Conditioning and Refrigeration 1-0-1
This course provides students with opportunities to experience hands-on application of specialized instruction in various areas related to the air conditioning and refrigeration industry.

ACR 203 Commercial Refrigeration 1-6-3
This course focuses on commercial refrigeration systems. Emphasis is placed on evaporators, condensers, compressors, expansion devices, special refrigeration components and application of refrigeration systems. Upon completion, students should be able to service and repair commercial refrigeration systems.
**ACR 205 System Sizing and Air Distribution 1-6-3**

This course provides instruction in the load calculation of a structure and system sizing. Topics of instruction include heat loss, heat gain, equipment and air distribution sizing, and factors making acceptable indoor air quality. Upon course completion, students should be able to calculate system requirements.

**ACR 209 Commercial Air Conditioning Systems 1-6-3**

This course focuses on servicing and maintaining commercial and residential HVACR systems. Topics include system component installation and removal and service techniques. Upon completion, the student should be able to troubleshoot and perform general maintenance on commercial and residential HVACR systems.

**ACR 210 Troubleshooting HVACR Systems 1-6-3**

This course provides instruction in the use of various meters and gauges used in the HVACR industry. Emphasis is placed on general service procedures, system diagnosis, and corrective measure, methods of leak detection, and system evacuation, charging and performance checks. Upon completion students should be able to perform basic troubleshooting of HVAC/R.

**Art (ART)**

**ART 100 Art Appreciation 3-0-3**

This course is designed to help the student find personal meaning in works of art and develop a better understanding of the nature and validity of art. Emphasis is on the diversity of form and content in original art work. Upon completion, students should understand the fundamentals of art and the materials used, and have a basic overview of the history of art.

**ART 101 Art Workshop I 0-6-3**

PREREQUISITE: Permission of the instructor.

This course is designed for both non-art and art majors who are interested in a variety of art projects concerned with community or college-related activities.

**ART 102 Art Workshop II 0-6-3**

PREREQUISITE: Permission of the instructor.

This course is designed for both non-art and art majors who are interested in a variety of art projects concerned with community or college-related activities.

**ART 113 Drawing I 0-6-3**

This course provides the opportunity to develop perceptual and technical skills in a variety of media. Emphasis is placed on communication through experimenting with composition, subject matter, and technique. Upon completion, students should demonstrate and apply the fundamentals of art to various creative drawing projects.

**ART 114 Drawing II 0-6-3**

PREREQUISITE: ART 113.

This course advances the students drawing skills in various art media. Emphasis is placed on communication through experimentation, composition, technique and personal expression. Upon completion, students should demonstrate creative drawing skills, the application of the fundamentals of art, and the communication of personal thoughts and feelings.

**ART 121 Two-Dimensional Composition I 0-6-3**

This course introduces the basic concepts of two-dimensional design. Topics include the elements and principles of design with emphasis on the arrangements and relationships among them. Upon completion, students should demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions.

**ART 122 Two-Dimensional Composition II 0-6-3**

PREREQUISITE: ART 121.

This course covers the theories and practice of composing two-dimensional images. Emphasis is placed on the relation between the basic elements and principles of design and their impact on the visual message. Upon completion, students should, through personal expression, demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions.

**ART 127 Three-Dimensional Composition 0-6-3**

This introduction to art materials and principles of design acquaints the beginner with fundamentals of three-dimensional art. This course is open to all students and is especially recommended for those who plan further study in art and art education.

**ART 133 Ceramics I 0-6-3**

This course introduces methods of clay forming as a means of expression. Topics may include hand building, wheel throwing, glazing, construction, design, and the functional and aesthetic aspects of pottery. Upon completion, students should demonstrate through their work, a knowledge of the methods, as well as an understanding of the craftsmanship and aesthetics involved in ceramics.

**ART 134 Ceramics II 0-6-3**

PREREQUISITE: ART 133.

This course develops the methods of clay forming as a means of expression. Topics may include hand building, glazing, design and the functional and aesthetic aspects of pottery, although emphasis will be placed on the wheel throwing method. Upon completion, students should demonstrate improved craftsmanship and aesthetic quality in the production of pottery.

**ART 173 Photography I 0-6-3**

This course is an introduction to the art of photography. Emphasis is placed on the technical and aesthetic aspects of photography with detailed instruction in darkroom techniques. Upon completion, students should understand the camera as a creative tool, understand the films, chemicals and papers, and have a knowledge of composition and history.

**ART 174 Photography II 0-6-3**

PREREQUISITE: ART 173.

This course advances the students’ technical and aesthetic knowledge of photography beyond the introductory level. Emphasis is placed on photographic composition and darkroom techniques as a means of communication. Upon completion, students should demonstrate through the photographic process their creative and communication skills.
ART 203 Art History I 3-0-3
This course covers the chronological development of different forms of art, such as sculpture, painting, and architecture. Emphasis is placed on history from the ancient period through the Renaissance. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and the impact of society on the arts.

ART 204 Art History II 3-0-3
This course covers a study of the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the Baroque to the present. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles, and the impact of society on the arts.

ART 221 Computer Graphics I 0-6-3
This course is designed to acquaint the student with the technology, vocabulary, and procedures used to produce artworks with computers. Emphasis is placed on the fundamentals of art, creativity, and the understanding of various graphic software. Upon completion, students should demonstrate a knowledge of computer graphics through production on a graphic program in a computer environment.

ART 222 Computer Graphics II 0-6-3
PREREQUISITE: ART 221 or permission of instructor.
These courses are designed to enhance the student’s ability to produce computer generated graphics. Emphasis is on the application of original design to practical problems using a variety of hardware and software. Upon completion, students should have an understanding of professional computer graphics.

ART 233 Painting I 0-6-3
This course is designed to introduce the student to fundamental painting processes and materials. Topics include art fundamentals, color theory, and composition. Upon completion, students should be able to demonstrate the fundamentals of art and discuss various approaches to the media and the creative processes associated with painting.

ART 234 Painting II 0-6-3
PREREQUISITE: ART 233.
This course is designed to develop the student’s knowledge of the materials and procedures of painting beyond the introductory level. Emphasis is placed on the creative and technical problems associated with communicating through composition and style. Upon completion, students should be able to demonstrate the application of the fundamentals of painting and the creative process to the communication of ideas.

ART 291 Supervised Study in Studio Art I 0/1-4/1-4
PREREQUISITE: Permission of the instructor.
This course is designed to enable the student to continue studio experiences in greater depth. Topics are to be chosen by the student with the approval of the instructor. Upon completion, students should have a greater expertise in a particular area of art.

ART 292 Supervised Study in Studio Art II 0/1-4/1-4
PREREQUISITE: ART 291 or permission of the instructor.
This course is designed to enable the student to continue studio experiences in greater depth. Topics are chosen by the student with the approval of the instructor. Upon completion, students should have greater expertise in a particular area of art.

ART 299 Art Portfolio 0/1-4/1-4
PREREQUISITE: Permission of the instructor.
This course is designed to help the art major in the preparation and presentation of an art portfolio. Emphasis is placed on representing the student’s potential as an artist in order to interest employers, clients or schools. Upon completion, students should be able to make a professional presentation of their design and communication skills.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Basic Automotive Collision Repair (ABR)*
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

ABR 111 Non-Structural Repair 1-2-3
Students are introduced to basic principles of non-structural panel repairs. Topics include shop safety, identification and use of hand/power tools, panel preparation, sheet metal repairs, and materials.

ABR 114 Non-Structural Panel Replacement 1-2-3
Students are introduced to principles of non-structural panel replacement. Topics include replacement and alignment of bolt on panels, full and partial panel replacement procedures, and attachment methods.

ABR 122 Surface Preparation 1-2-3
This course introduces students to methods of surface preparation for vehicular refinishng. Topics include sanding techniques, metal treatment, selection undercoats, and proper masking procedures.

ABR 123 Paint Application & Equipment 1-2-3
This course introduces students to methods of paint application and equipment used for vehicular refinishng. Topics include spray gun and related equipment use, paint mixing, matching, and applying the final topcoat.

ABR 151 Safety & Environmental Practices 1-2-3
This course is designed to instruct the student in safe work practices. Topics include OSHA requirements, the right to know laws, EPA regulations, as well as state and local laws.

ABR 154 Automotive Glass and Trim 1-2-3
This course is a study of automotive glass and trim. Emphasis is placed on removal and replacement of structural glass, non-structural glass, and automotive trim. Upon completion, students should be able to remove and replace automotive trim and glass.
ABR 156 Cutting and Welding 1-2-3
Students are introduced to the various automotive cutting and welding processes. Emphasis is placed on safety, plasma arc and oxy-acetylene cutting, resistance type spot welding, and Metal Inert Gas (MIG) welding. Upon completion, students should be able to safely perform automotive cutting and welding procedures.

ABR 157 Plastic Repairs 1-2-3
This course provides instruction in automotive plastic repairs. Topics include plastic welding (airless, hot and chemical), use of flexible repair fillers, identification of types of plastics, and determining the correct repair procedures for each. Upon completion, students should be able to correctly identify and repair the different types of automotive plastics.

ABR 181 Special Topics in Auto Body 0-3-3
This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion, students should be able to demonstrate skills to meet specific needs.

ABR 182 Special Topics in Auto Body 0-6-3
This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion, students should be able to demonstrate skills to meet specific needs.

ABR 213 Automotive Structural Analysis 1-2-3
Students learn methods of determining structural misalignment. Topics include methods of inspection, types of measuring equipment, data sheets, and identifying types of structural damage.

ABR 214 Automotive Structural Repair 1-2-3
This course provides instruction in the correction of structural damage. Topics include types and use of alignment equipment, anchoring and pulling methods, and repair/replacement of structural components.

ABR 223 Automotive Mechanical Components 1-2-3
This course provides instruction in collision related mechanical repairs. Emphasis is placed on diagnosis and repairs to drive train, steering/suspension components, and various other mechanical repairs.

ABR 224 Automotive Electrical Components 1-2-3
This course provides instruction in collision related electrical repairs and various restraints systems, including seat belts, seat belt tensioners, and airbags. Topics include basic DC theory, types of diagnostic equipment, circuit protection, wire repair and use of wiring diagrams, airbag modules, and impact sensors.

ABR 255 Steering & Suspension 1-2-3
This course introduces students to the various types of suspension and steering systems used in the automotive industry. Emphasis is placed on system components, suspension angles, and effect of body/frame alignment on these components and angles.

ABR 258 Heating & AC in Collision Repair 1-2-3
This course is a study of automotive air conditioning, heating, and cooling systems. Topics include automotive air conditioning, heating and cooling systems theory, component replacement and system services.

ABR 261 Restraint Systems 1-2-3
Both the function and design of various restraints and passive restraints systems, including seat belts, seat belt tensioners, and airbags, will be discussed. Topics include airbag modules and impact sensors for both front and side airbag systems. Students learn about using service manuals, flow charts, and wiring diagrams during the diagnosis and repair process.

ABR 265 Paint Defects & Final Repairs 1-2-3
This course introduces students to methods of identifying paint defects, causes, cures, and final detailing. Students learn to troubleshoot and correct paint imperfections.

ABR 266 Aluminum Welding in Collision Repair 1-2-3
This course covers the principles and techniques of aluminum GMA (MIG) welding. Students learn to set up and tune a welding machine, address safety issues, perform proper welding techniques, prepare metal surfaces, and identify and correct weld defects.

ABR 281 Special Topics in Auto Body 0-6-3
This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student’s need to improve or expand skills. Upon course completion, students should be able to demonstrate skills to meet specific needs.

ABR 293 Auto Body Repair Co-op 0-3-3
This course is designed to provide practical shop experience for advanced students through part-time employment in the collision repair industry. Emphasis is placed on techniques used in collision repair facilities. Upon completion, students should have gained skills necessary for entry level employment.

Basic Automotive Service Technology and Advanced Automotive Service Technology (AUM)*

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

AUM 101 Fundamentals of Automotive Technology 1-4-3
This course provides basic instruction in Fundamentals of Automotive Technology.

AUM 112 Electrical Fundamentals 1-4-3
This course introduces the principles and laws of electricity. Emphasis is placed on wiring diagrams, test equipment, and identifying series, parallel and series-parallel circuits. Upon completion, students should be able to calculate, build, and measure circuits.

AUM 121 Braking Systems 1-4-3
This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. ABR 223 Automotive Mechanical Components is a suitable substitute for this course.
AUM 122  Steering, Suspension and Alignment  1-4-3
This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of steering and suspension. ABR 255 - Steering & Suspension is a suitable substitute for this course.

AUM 124  Automotive Engines  1-4-3
This course provides instruction on the operation, design, and superficial repair of automotive engines. Emphasis is placed on understanding the four-stroke cycle, intake and exhaust manifolds and related parts, engine mechanical timing components, engine cooling and lubrication system principles and repairs, and basic fuel and ignition operation.

AUM 130  Drive Train and Axles  1-4-3
This course provides basic instruction in automotive drive trains and axles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and driveability. ABR 223 Automotive Mechanical Components is a suitable substitute for this course.

AUM 133  Motor Vehicle Air Conditioning  1-4-3
This course provides basic instruction in theory, operation, and repair of automotive heating and air conditioning systems. Emphasis is placed on the understanding and repair of vehicle air conditioning and heating systems, including but not limited to air management, electrical and vacuum controls, refrigerant recovery, and component replacement. ABR 258 - Heating and AC in Collision Repair is a suitable substitute for this course.

AUM 162  Electrical and Electronic Systems  1-4-3
This is an intermediate course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of battery, starting, charging, and lighting systems, subsystems, and components.

AUM 182  Special Topics  0-4-2
This is an intermediate course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of battery, starting, charging, and lighting systems, subsystems, and components.

AUM 212  Advanced Electrical and Electronic Systems  1-4-3
These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor’s discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, or related area in automotive mechanics. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of their choice.

AUM 220  Advanced Automotive Engines  1-4-3
This course provides in-depth instruction concerning internal engine diagnosis, overhaul and repair, including but not necessarily limited to the replacement of timing chains, belts, and gears, as well as the replacement or reconditioning of valve train components as well as replacement of pistons, connecting rods, piston rings, bearings, lubrication system components, gaskets, and oil seals.

AUM 224  Manual Transmission and Transaxle  1-4-3
This course covers basic instruction in manual transmissions and transaxles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and driveability.

AUM 230  Auto Transmission and Transaxle  1-4-3
This course covers basic instruction in automatic transmissions and transaxles. Emphasis is placed on the comprehension of principles and power flow of automatic transmissions and repairing or replacing internal and external components.

AUM 239  Engine Performance  1-4-3
This course provides basic instruction in engine performance with emphasis on fuel and ignition systems relating to engine operation.

AUM 244  Engine Performance and Diagnostics  1-4-3
This course provides advanced instruction in engine performance. Emphasis is placed on engine management and computer controls of ignition, fuel, and emissions systems relating to engine performance and driveability.

AUM 246  Automotive Emissions  1-4-3
This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting and repair of systems, subsystems, and components.

AUM 281  Special Topics  0-6-3
These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor’s discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive or related area in automotive mechanics. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of his/her choice.

AUM 291  Co-op  0-6-3
These courses constitute a series wherein the student works on a part-time basis in a job directly related to automotive mechanics. In these courses the employer evaluates the student’s productivity and the student submits a descriptive report of his/her work experiences. Upon completion, the student will demonstrate skills learned in an employment setting.
Biology (BIO)

BIO 103 Principles of Biology I 3-2-4
BIO 103A is the theory portion only of BIO 103. Students must take BIO 103L as a co-requisite to BIO 103A. BIO 103L is the lab portion that accompanies the lecture class. This is an introductory course for science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific method, basic principles of evolution, and an overview of the diversity of life with emphasis on viruses, prokaryotes, and protist. A 120 minute laboratory is required.

+BIO 104 Principles of Biology II 3-3-4
PREREQUISITE: BIO 103 or BIO 103A.
This course is an introduction to the basic ecological and evolutionary relationships of plants and animals and a survey of plant and animal diversity including classification, morphology, physiology, and reproduction. A 180 minute laboratory is required.

+BIO 111 Survey of Human Biology 3-2-4
This course for the non-science major covers an overview of structure and function of the human body with an emphasis on major organ systems. Laboratory is required. This course is offered upon sufficient enrollment, and is not a core transfer course.

BIO 201 Human Anatomy and Physiology I 3-2-4
*BIO 103 is strongly recommended
Human Anatomy and Physiology I covers the structure and function of the human body. Included is an orientation of the human body, basic principles of chemistry, a study of cells and tissues, metabolism, joints, the integumentary, skeletal, muscular, and nervous systems, and the senses. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120 minute laboratory is required.

+BIO 202 Human Anatomy and Physiology II 3-2-4
PREREQUISITE: BIO 201.
Human Anatomy and Physiology II covers the structure and function of the human body. Included is a study of basic nutrition, basic principles of water, electrolyte, and acid-base balance, the endocrine, respiratory, digestive, excretory, cardiovascular, lymphatic, and reproductive systems. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120 minute laboratory is required.

+BIO 220 General Microbiology 2-4-4
PREREQUISITE: BIO 103 or BIO 103A or BIO 201
(RECOMMENDED 4 SEMESTER HOURS OF CHEMISTRY).
This course includes historical perspectives, cell structure and function, microbial genetics, infectious diseases, immunology, distribution, physiology, culture, identification, classification, and disease control of microorganisms. The laboratory experience includes micro-techniques, distribution, culture, identification, and control. Two 120 minute laboratories are required.

+BIO 250 Directed Studies in Biology I 0/2-8/1-4
PREREQUISITE: Permission of the instructor. This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to the beginning of the class. Upon competition students will be able to demonstrate knowledge of the topics as specified by the instructor.

Availability of this course is dependent upon sufficient demand. See advisor for further information.

Business (BUS)

BUS 193 Business Co-op I 1-0-1
PREREQUISITE: Successful completion of two (2) business courses.
This course is part of a series wherein the student works in an accounting-related job. Emphasis is placed on student’s work experience as it integrates academic knowledge with practical application through exposure to accounting practices in the business environment. The grade is based on the employer’s evaluation of each student’s productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 198 Computer Information Systems in a Call Center 3-0-3
PREREQUISITE: Instructor approval and minimum WorkKeys levels.
This course is a “hands-on” introduction to the computer systems used in a typical call center. Topics include computer fundamentals, basic hardware, and specific software applications common to the call center industry. Working within a customer information database and basic keyboarding will also be a component of this course.

BUS 199 Call Center Operations 2-0-2
PREREQUISITE: Instructor approval and minimum WorkKeys levels.
This course is an introduction to the call center environment. Topics include call center organizational structures, terminology, how calls are screened and routed, basic telephone functions, and the call flow process. Also included is an overview of customer service and the competitive advantage in the marketplace and performance measures used in typical call centers.

BUS 215 Business Communication 3-0-3
This course covers written, oral and nonverbal communications. Topics include the application of communication principles to the production of clear, correct, and logically organized faxes, e-mail, memos, letters, resumes, reports, and other business communications.

BUS 241 Principles of Accounting I 3-0-3
This course is designed to provide a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is placed on financial accounting, including the accounting cycle, and financial statement preparation analysis.

BUS 242 Principles of Accounting II 3-0-3
PREREQUISITE: BUS 241 or permission of instructor.
This course is a continuation of BUS 241. In addition to a study of financial accounting, this course also places emphasis upon managerial accounting, with coverage of corporations, statement analysis, introductory cost accounting, and use of information for planning, control, and decision making.

BUS 248 Managerial Accounting 3-0-3
PREREQUISITE: Permission of the instructor.
This course is designed to familiarize the student with management concepts and techniques of industrial accounting.
procedures. Emphasis is placed on cost behavior, contribution approach to decision-making, budgeting, overhead analysis, cost-volume-profit, analysis and cost accounting systems.

**BUS 263 The Legal and Social Environment of Business** 3-0-3
This course provides an overview of the legal and social environment for business operations with emphasis on contemporary issues and their subsequent impact on business. Topics include the Constitution, the Bill of Rights, the legislative process, civil and criminal law, administrative agencies, trade regulations, consumer protection, contracts, employment and personal property.

**BUS 271 Business Statistics I** 3-0-3
This is an introductory study of basic statistical concepts applied to economic and business problems. Topics include the collection, classification, and presentation of data, statistical description and analysis of data, measures of central tendency and dispersion, elementary probability, sampling, estimation and introduction to hypothesis testing.

**BUS 272 Business Statistics II** 3-0-3
PREREQUISITE: BUS 271.
This course is a continuation of BUS 271. Topics include sampling theory, statistical interference, regression and correlation, chi square, analysis of variance, time series index numbers, and decision theory. Offered in summer term only.

**BUS 275 Principles of Management** 3-0-3
This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing, and controlling with emphasis on practical business applications.

**BUS 279 Small Business Management** 3-0-3
This course provides an overview of the creation and operation of a small business. Topics include buying a franchise, starting a business, identifying capital resources, understanding markets, managing accounts receivable, managing accounting systems, budgeting systems, inventory systems, purchasing insurance, and the importance of appropriate legal counsel.

**BUS 285 Principles of Marketing** 3-0-3
This course provides a general overview of the field of marketing. Topics include marketing strategies, channels of distribution, marketing research, and consumer behavior.

**BUS 298 Directed Studies** 1-3/0/1-3
PREREQUISITE: Permission of the instructor.
This course offers independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need.

**Basic Cabinetmaking (CAB)***
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**CAB 102 Introduction to Lumber and Wood Products** 2-3-3
This is an introductory course to lumber, grades, sizes, characteristics, and uses. Topics include the natural properties of trees, identification of various types of wood, the milling process, various defects found in wood, and how it is manufactured. Upon completion the students should be knowledgeable in the wood and wood products for the production of cabinets and fine furniture.

**CAB 103 Sizes, Dimension, and Joints** 1-4-3
This course includes the study of cutting lumber to dimensions and materials to size with power tools. Emphasis is on job planning and the construction of all types of joints made with hand and power tools. Upon course completion, students should be able to plan jobs, make shop drawings, job layouts and patterns.

**CAB 104 Cabinet Shop Operations** 3-0-3
This course covers start up and general operation of a cabinet shop. Topics include shop organization, fire safety, financing, and tool acquisition. Upon completion, students should have basic knowledge of starting a custom cabinet shop.

**CAB 110 Equipment Maintenance** 2-6-3
This is an introductory course to maintaining woodworking tools and equipment. Emphasis is on equipment inspection, cleaning and lubrication, as well as removing and replacing saw blades, jointer, shaper, and planer knives. Upon course completion, students should be proficient in maintaining basic woodworking equipment.

**CAB 141 Woodfinishing** 0-6-3
Emphasis is on filling, rubbing, spraying, and building up finishes. Upon course completion, students should be able to perform woodfinishing procedures.

**CAB 145 Refinishing Furniture and Antiques** 0-6-3
This course offers instruction in refinishing furniture and restoring antiques. Emphasis is on the removal of old finish by stripping, washing, and sanding furniture; repair of broken pieces; and the use of veneers in patching. Upon course completion, students should be able to refinish furniture and antiques.

**CAB 193 Co-op** 0-9-3
PREREQUISITE: Permission of instructor.
These courses constitute a series wherein the student works on a part-time basis in a job directly related to cabinetmaking. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting.

**CAB 204 Cabinetmaking and Millwork** 1-6-3
PREREQUISITE: CAB 102 or permission of the instructor.
This course focuses on design and construction of casework. Topics include study of designs, construction and installation of kitchen cabinets, vanities, shelves, and other casework and the use and installation of cabinet hardware. Upon completion, students should be able to design, construct and install basic interior casework.
CAB 205  Furniture Construction  1-6-3
PREREQUISITE: Permission of the instructor. This course covers design and construction of fine furniture. Emphasis is on the development of highly advanced woodworking skills, such as turning duplicate parts, joinery, building jigs and fixtures. Upon completion, students should be able to perform basic skills necessary to construct fine furniture.

CAB 230  Estimating Costs in Cabinetmaking  3-0-3
This course focuses on estimating costs necessary to complete cabinetmaking projects. Emphasis is on figuring costs of materials and labor and on the use of pertinent formulas. Upon completion, students should be able to estimate costs of complete cabinetmaking projects.

CAB 260  Woodturning  1-10-5
PREREQUISITE: Permission of the instructor. This course focuses on turning components for fine furniture projects. Emphasis is on operation and maintenance of wood lathes and tools. Upon completion, students should be able to turn duplicate posts and table legs.

Basic Carpentry (CAR)*
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

CAR 111  Construction Basics  3-0-3
This course introduces students to the opportunities in and requirements of the construction industry. Topics include economic outlook for construction, employment outlook, job opportunities, training, apprenticeship, entrepreneurship, construction tools, materials, and equipment, job safety and OSHA standards. Upon completion, students should be able to identify the job market, types of training, knowledge of apprenticeship opportunities, construction tools, materials, equipment, and safety procedures.

CAR 112  Floors, Walls, Site Prep  3-0-3
This course introduces the student to floor and wall layout, and construction. Topics include methods of house framing, components of floor framing, layouts, sub-flooring, connectors and fasteners, and site preparation. Upon completion, students should be able to identify various types of floor framing systems, select the sizes of floor joists, identify types of house framing, list types of fasteners, and identify property lines, set backs, and demonstrate a working knowledge of terrain and batter boards.

CAR 113  Floors, Walls, Site Prep Lab  0-6-3
COREQUISITE: CAR 112. The student will engage in applications of floor and wall construction, application of required tools, use of the builder transit, level rod, tape measure and grade stakes. Emphasis is placed on cutting sill plates, floor joists, girders, header bridging, sub-flooring, stud wall partitions, door and window headers, wall bracing, leveling instruments, and batter boards. Upon completion, students should be able to layout and construct a floor, including the sill, joist bridging and openings, install sub-flooring, construct interior and exterior walls, and layout property stakes of site plans.

CAR 121  Introduction to Blueprint Reading  3-0-3
This course introduces the student to the basic concepts of blueprint reading. Topics include scales, symbols, site plans, and notations. Upon completion, the student should be able to identify drawings, scale various drawings, identify different types of lines, symbols, and notations.

CAR 131  Roof and Ceiling Systems  3-0-3
This course focuses on the design and installation of roof and ceiling systems. Emphasis is placed on rafters, trusses, ceiling joists, roof deck, and roofing materials. Upon completion, students should be able to design a roof and ceiling system, identify proper installation methods of roofing materials, and describe applicable safety rules.

CAR 132  Interior and Exterior Finish  1-4-3
This course introduces the student to interior and exterior finishing materials and techniques. Topics include interior trim of windows and doors, ceilings and wall moldings, exterior sidings, trim work, painting, and masonry finishes. Upon completion, students should be able to identify different types of doors, windows and moldings and describe the uses of each, identify types of exterior sidings and trim, and describe the different types of paint and their proper application.

CAR 133  Roof and Ceiling Systems Lab  0-6-3
COREQUISITE: CAR 131. The course provides students with practical experience in building and installing roof and ceiling systems. Emphasis is placed on job site safety, layout and cutting of rafters and joists, cutting and building trusses, installing roof decking and roofing materials. Upon completion, students should be able to cut and install rafters, joists and trusses, cut and apply roof decking and roofing materials, and apply safety rules for job site.

CAR 193  Internship in Carpentry  0-9-3
This course is designed to provide exposure to carpentry practices in non-employment situations. Emphasis is placed on techniques used in the carpentry profession. This course allows students to refine their skills necessary for entry-level employment.

CAR 206  Special Projects in Carpentry  3-0-3
This course introduces the students to plan, execute, and present results of individual projects in carpentry. Emphasis is placed on enhancing skill attainment in the carpentry field. This culminating course allows students to independently apply skills attained in previous courses.

CAR 226  Metal Framing  0-3-3
This course introduces the students to metal framing of floors, walls, ceilings, and roofs. Emphasis is placed on metal frame construction. Upon completion, students are expected to be able to describe components and proper application of metal framing, properly construct floors, walls, ceilings, and roofs.

CAR 228  Stairs, Molding, and Trim  1-2-3
This course focuses on the basics of stair design, layout, and construction. Topics also include cutting and installing stair trim and molding. Upon course completion, students should be able to layout, cut, and construct stairs, and install trim and molding.
CAR 232 Construction Project Management 3-0-3
This course focuses on the basic information necessary for successfully managing a construction project. Topics include basic building blocks of scheduling, refining a schedule, communications, techniques for estimating time to complete projects, timely delivery of materials, appropriate manpower scheduling, and use of construction management software. Upon completion, students are expected to understand the meaning and purpose of project planning and management, use of a schedule in management, and be able to communicate and coordinate work activities. The students should also be able to develop a comprehensive estimate for the completion of a construction project.

Chemistry (CHM)
+CHM 099 Developmental Chemistry 3-0-3
This course is designed for students with little or no background in chemistry. This preparatory course offers a detailed review of the mathematical base for chemistry, including formulas and equations, and covers basic chemical calculations of stoichiometry, gas laws and solutions. Laboratory techniques and safety are also included.

+CHM 104 Introduction to Inorganic Chemistry 3-3-4
PREREQUISITE: MTH 116 or MTH 098 or equivalent math placement score.
This is a survey course of general chemistry for students who do not intend to major in science or engineering and may not be substituted for CHM 111. Lecture will emphasize the facts, principles, and theories of general chemistry including math operations, matter and energy, atomic structure, symbols and formulas, nomenclature, the periodic table, bonding concepts, equations, reactions, stoichiometry, gas laws, phases of matter, solutions, pH, and equilibrium reactions. Laboratory is required.

+CHM 105 Introduction to Organic Chemistry 3-3-4
PREREQUISITE: CHM 104 or CHM 111.
This is a survey course of organic chemistry and biochemistry for students who do not intend to major in science or engineering. Topics will include basic nomenclature, classification of organic compounds, typical organic reactions, reactions involved in life processes, function of biomolecules, and the handling and disposal of organic compounds. Laboratory is required.

+CHM 111 College Chemistry I 3-3-4
PREREQUISITE: MTH 100 or equivalent math placement score.
This is the first course in a two-semester sequence designed for the science or engineering major who is expected to have a strong background in mathematics. Topics in this course include measurement, nomenclature, stoichiometry, atomic structure, equations and reactions, basic concepts of thermochemistry, chemical and physical properties, bonding, molecular structure, gas laws, kinetic-molecular theory, condensed matter, solutions, colloids, and some descriptive chemistry topics. Laboratory is required.

+CHM 112 College Chemistry II 3-3-4
PREREQUISITE: CHM 111.
This is the second course in a two-semester sequence designed primarily for the science and engineering student who is expected to have a strong background in mathematics. Topics in this course include chemical kinetics, chemical equilibria, acids and bases, ionic equilibria of weak electrolytes, solubility product principle, chemical thermodynamics, electrochemistry, oxidation-reduction, nuclear chemistry, an introduction to organic chemistry and biochemistry, atmospheric chemistry, and selected topics in descriptive chemistry including the metals, nonmetals, semi-metals, coordination compounds, transition compounds, and post-transition compounds. Laboratory is required.

+CHM 221 Organic Chemistry I 3-3-4
PREREQUISITE: CHM 112.
This is the first course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, and aromatic compounds with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques.

+CHM 222 Organic Chemistry II 3-3-4
PREREQUISITE: CHM 221.
This is the second course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, aromatic, and biological compounds, polymers and their derivatives, with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques.

CHM 250 Directed Studies in Chemistry 1-0-1
PREREQUISITE: Divisional approval.
This course is designed for independent study in specific areas of chemistry chosen in consultation with a faculty member and carried out under faculty supervision. This course may be repeated three (3) times for credit.

Children Development (CHD)
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

CHD 100 Introduction of Early Care and Education of Children 3-0-3
This course introduces students to the child education and care profession. It is designed to increase understanding of the basic concepts of child development and the developmental characteristics of children from birth through age 8/9 years. This course is the foundation for planning appropriate activities for children and establishing appropriate expectations of young children. This class also offers an opportunity to study the developmental domains (social, emotional, cognitive/language and physical). Course includes observations of the young child in early childhood settings.
CHD 201  Child Growth and Development Principles  3-0-3
This course is a systematic study of child growth and development from conception through early childhood. Emphasis is placed on principles underlying physical, mental, emotional and social development, and on methods of child study and practical implications. Upon completion, students should be able to use knowledge of how young children differ in their development and approaches to learning to provide opportunities that support the physical, social, emotional, language, cognitive, and aesthetic development of children.

CHD 202  Children’s Creative Experiences  2-2-3
This course focuses on fostering creativity in preschool children and developing a creative attitude in teachers. Topics include selecting and developing creative experiences in language arts, music, art, science, math and movement with observation and participation with young children required. Upon completion, students should be able to select and implement creative and age-appropriate experiences for young children.

CHD 203  Children’s Literature and Language Development  2-2-3
This course surveys appropriate literature and language arts activities designed to enhance young children’s speaking, listening pre-reading and writing skills. Emphasis is placed on developmental appropriateness as related to language. Upon completion, students should be able to create, evaluate and demonstrate activities which support a language-rich environment for young children.

CHD 204  Methods and Materials for Teaching Children  2-2-3
This course introduces basic methods and materials used in teaching young children. Emphasis is placed on students compiling a professional resource file of activities used for teaching math, language arts, science and social studies concepts. Upon completion, students should be able to demonstrate basic methods of creating learning experiences using appropriate techniques, materials and realistic expectations.

CHD 205  Program Planning for Educating Young Children  3-0-3
This course is designed to give students practice in lesson and unit planning, writing behavioral objectives, and evaluating activities taught to young children. Emphasis is placed on identifying basic aspects of cognitive development and how children learn. Upon completion, students should be able to plan and implement developmentally appropriate curriculum and instructional practices based on knowledge of individual differences and the curriculum goals and content.

CHD 206  Children’s Health and Safety  3-0-3
This course introduces basic health, nutrition and safety management practices for young children. Emphasis is placed on setting up and maintaining a safe, healthy environment for young children including specific procedures for infants and toddlers and procedures regarding childhood illnesses and communicable diseases. Upon completion, students should be able to prepare a healthy, safe environment, plan nutritious meals and snacks, and recommend referrals if necessary.

CHD 207  Observing and Recording Behaviors of Young Children  3-0-3
PREREQUISITE: CHD 201
This course will provide students information on child observations, portfolio building, observation documentation, and various recording techniques, as well as a review of child development principles. Students will also be given guidance for the appropriate use of assessment materials and ways to support and work with families. Course may include practice in documenting observations.

CHD 208  Administration of Child Development Programs  3-0-3
This course includes appropriate administrative policies and procedures relevant to preschool programs. Topics include local, state and federal regulations; budget planning; record keeping; personnel policies and parent involvement. Upon completion, students should be able to identify elements of a sound business plan, develop familiarity with basic record-keeping techniques, and identify elements of a developmentally appropriate program.

CHD 209  Infant and Toddler Education Programs  3-0-3
This course focuses on child development from infancy to thirty months of age with emphasis on planning programs using developmentally appropriate material. Emphasis is placed on positive ways to support an infant’s social, emotional, physical and intellectual development. Upon completion, students should be able to plan an infant-toddler program and environment which is appropriate and supportive of the families and the children.

CHD 210  Educating Exceptional Young Children  2-2-3
This course explores the many different types of exceptionalities found in young children. Topics include speech, language, hearing and visual impairments; gifted and talented children; mental retardation; emotional, behavioral, and neurological handicaps. Upon completion, students should be able to identify appropriate strategies for working with young exceptional children.

CHD 211  Child Development Seminar  2-0-2
A selection of topics relating to young children are addressed in this course. Subject matter will vary according to industry and student needs. Upon completion, students should demonstrate competencies designed to assess course objectives.

CHD 212  Child Development Associate Seminar  2-2-3
This course includes topics from competency areas required for individuals working toward or renewing CDA credentials. Industry needs determine course topics. Upon completion, students should demonstrate competency in meeting course objectives.

CHD 214  Families and Communities in Early Care and Education Programs  2-2-3
This course provides students with information about working with diverse families and communities. Students will be introduced to family and community settings, the importance of relationships with children, and the pressing needs of today’s society. Students will study and practice techniques for developing these important relationships and effective communication skills.
CHD 215 Supervised Practical Experience in Early Childhood Education 0-6-3
PREREQUISITE: Permission of the instructor. This course provides a minimum of 90 hours of hands-on, supervised experience in an approved program for young children. Emphasis is placed on performance of daily duties which are assessed by the college instructor and the cooperating teacher. Upon completion, students should be able to demonstrate competency in a child care setting.

Commercial Food Service (CFS)

CFS 110 Basic Food Preparation 3-0-3
CO-REQUISITE: CFS 120 Basic Food Preparation Lab
In this course students acquire fundamental knowledge and skills in preparing a variety of basic foods. Specific topics include safety, the history of food service, professional standards of conduct and ethics, credentialing, the kitchen brigade, tools, and techniques for preparing various types of food items.

CFS 112 Sanitation, Safety, and Food Service 2-0-2
This course introduces the basic principles of sanitation and safety to food service handling including purchasing, storing, preparation and serving. Specific topics include the dangers of microbial contaminants, food allergens and foodborne illness, safe handling of food, the flow of food, and food safety management systems. At the conclusion of this course students will be prepared to test for ServSafe® certification. The content of this course is foundational for all culinary arts classes.

CFS 120 Basic Food Preparation Lab 0-2-2
CO-REQUISITE: CFS 110 Basic Food Preparation
In this course students apply fundamental knowledge and skills in preparing a variety of basic foods. Specific topics include safety, the history of food service, professional standards of conduct and ethics, credentialing, the kitchen brigade, tools, and techniques for preparing various types of food items. At the conclusion of this course students will demonstrate basic food preparation skills.

CFS 181 Special Topics in Commercial Food Services 0-2-2
These courses provide specialized instruction in various areas related to the culinary arts industry. Emphasis is placed on meeting students’ needs.

CFS 299 Special Topics in Commercial Food Services 3-0-3
In this course, students will demonstrate chef’s skills developed during culinary training by practical examination through preparing a gourmet meal for a panel of chef judges.

Pre-Computer Science/Computer Information Systems/Computer Information Systems Technology/Computer Technology (CIS)

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

CIS 096 Introduction to Computers 3-0-3
This course is designed to introduce students to basic computer terminology, hardware, input/output devices, memory, and processing. Windows as a graphical user interface and operations and applications that use the Windows environment are emphasized.

CIS 146 Microcomputer Applications 3-0-3
This course is an introduction to the most common microcomputer software applications. These software packages should include typical features of applications, such as word processing, spreadsheets, database management, and presentation software. Upon completion, students will be able to utilize selected features of these packages. This course will help prepare students for the MOS and IC² certification. This course or an equivalent is CORE for the AAS CIS programs. NOTE: Students without prior computer knowledge or keyboarding should enroll in CIS 096.

CIS 147 Advanced Microcomputer Applications 3-0-3
PREREQUISITE: CIS146 or permission of instructor. This course is a continuation of CIS 146 in which students utilize the advanced features of topics covered in CIS 146. Advanced functions and integration of word processing, spreadsheets, database, and presentation packages among other topics are generally incorporated into the course and are to be applied to situations found in society and business. Upon completion, the student should be able to apply the advanced features of selected software appropriately to typical problems found in society and business. This course will help prepare students for the MOS certification.

CIS 148 Post Advanced Microcomputer Applications 3-0-3
PREREQUISITE: CIS147. This course builds on concepts associated with various microcomputer applications with emphasis on advanced features commonly found in software applications. Advanced features of word processing, spreadsheets, database, and presentation packages are introduced. Features such as macros, Visual Basic Applications, and online features are included in the content of the course. Upon completion, the student will be able to apply the advanced features of selected software to the workplace. This course will help prepare students for the MOS certification. This course offered in distance format only. Offered in summer semester only.

CIS 150 Introduction to Computer Logic and Programming 3-0-3
This course includes logic, design and problem solving techniques used by programmers and analysts in addressing and solving common programming and computing problems. The most commonly used techniques of flowcharts, structure charts, and pseudocode will be covered and students will be expected to apply the techniques to designated situations and problems. This course is a CIS elective offered in distance format only.

CIS 151 Graphics for the World Wide Web 3-0-3
Flash is the software used in this course. This course will provide an overview to the theory, tools, and techniques necessary for creating high-quality graphics using design software tools. This course may be substituted with CAT 150 Imaging I: Principles of Photography and Introduction to Photoshop and CAT 180 Imaging II: Techniques of Photoshop and Painter or equivalent.
CIS 153  Introduction to Unity 3D Scripting  3-0-3
This course teaches Unity 3D in game scripting along with programming basics. This course will prepare students with basic knowledge of Namespaces and Classes, Conditional statements and loops, Unity 3D, GUI, Unity’s Mono Behaviors, proper formatting skills, and firm understanding of Unity and .Net data types.

CIS 185  Computer Ethics  3-0-3
This course will survey the various issues surrounding computer ethics.

CIS 189  Co-op for CIS I  0-3-3
This course is part of a series wherein the student works in a degree/program related job. Emphasis is placed on student’s work experience as it integrates academic knowledge with practical application through exposure to computer practices in informational technologies environment. The grade is based on the employer’s evaluation of each student’s productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

CIS 191  Intro to Computer Programming Concepts  3-0-3
This course introduces fundamental concepts, including an algorithmic approach to problem solving via the design and implementation of programs in selected languages. Structured programming techniques involving input/output, conditional statements, loops, files, arrays and structures and simple data structures are introduced. Students are expected to write programs as part of this course. This course is offered in distance format only with weekly lab meetings.

CIS 199  Network Communications  3-0-3
This course is designed to introduce students to the basic concepts of computer networks. Emphasis is placed on gaining an understanding of the terminology and technology involved in implementing networked systems. The course will cover the OSI and TCP/IP network models, communications protocols, transmission media, networking hardware and software, LANs (Local Area Networks) and WANs (Wide Area Networks), Client/Server technology, the Internet, Intranets and network troubleshooting. Upon completion of the course, students will be able to design and implement a computer network. Students will create network shares, user accounts, and install print devices while ensuring basic network security. They will receive hands-on experience building a mock network in the classroom. This course will help prepare students for the CCNA and Network + certifications. This is a CORE course for the AAS CIS programs. CIS 161 or CIS 273 may be used as a suitable substitute for this course. Offered on the Shoals Campus only. Offered in summer semester only.

CIS 205  Control Language and Utilities Applications  3-0-3
This course introduces computer operation and the job or executive language on a mini or mainframe computer using both batch and on-line techniques. Utilities including sorts, screen design aids, and control programs while operating system concepts such as scheduling are introduced. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. Offered in summer semester only.

CIS 207  Introduction to Web Development  3-0-3
Notepad and Internet Explorer are used in this course. At the conclusion of this course, students will be able to use specified markup languages to develop basic Web pages. Offered in summer semester only.

CIS 208  Intermediate Web Development  3-0-3
Dreamweaver is the software used in this course. This course builds upon basic skills in Web authoring. Various Web authoring tools are introduced. Upon completion students will be able to use these tools to enhance Web sites.

CIS 209  Advanced Web Development  3-0-3
This is an advanced Web design course emphasizing the use of scripting languages to develop interactive Web sites. Upon completion students will be able to create data driven Web sites. Xammp is a free web portable server used in this course.

CIS 212  Visual Basic Programming  3-0-3
This course emphasizes BASIC programming using a graphical user interface. The course will emphasize graphical user interfaces with additional topics on such topics as advanced file handling techniques, simulation, and other selected areas. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

CIS 215  C# Programming  3-0-3
This course is an introduction to the C# programming language. The goal of this course is to provide students with the knowledge and skills they need to develop C# applications for the Microsoft.NET Platform. Topics include program structure, language syntax, and implementation details.

CIS 222  Database Management Systems  3-0-3
This course will discuss database system architectures, concentrating on Structured Query Language (SQL). It will teach students how to design, normalize and use databases with SQL, and to link those to the Web.

CIS 223  Three Dimensional Computer Modeling  3-0-3
Maya is the software used in this course. This course is a study in 3D computer modeling and 3D painting beginning with primitive shapes and creating compelling 3D objects for use in model libraries, games, print material, web sites, visual simulation, and architectural applications. Powerful operations for modeling and 3D painting are incorporated into an interface that is simple and intuitive to use.

CIS 224  Three Dimensional Computer Animation  3-0-3
Maya is the software used in this course. This course is a study in 3D computer animation. Course contents include a review of 3D modeling, rendering the 3D animations, compositing and special effects for both video and digital editing, video and film recording, storyboard and sound design, technical testing and production estimates and scheduling.

CIS 241  Introduction to RPG Programming  3-0-3
PREREQUISITE: CIS146 or CIS150 or equivalent.
This course introduces the fundamental concepts of RPG (Report Program Generator). It includes such topics as report preparation, control breaks, and file processing. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. Offered in summer semester only.
CIS 249 Microcomputer Operating Systems 3-0-3
This course provides an introduction to microcomputer operating systems. Topics include a description of the operating system, system commands, and effective and efficient use of the microcomputer with the aid of its system programs. Upon completion, students should understand the function and role of the operating system, its operational characteristics, its configuration, how to execute programs, and efficient disk and file management. This course is a programming elective.

CIS 250 E-Commerce 3-0-3
This course is an introduction into e-commerce. Topics include marketing, building an e-commerce store, security, and electronic payment systems. Upon completion students will be able to build an e-commerce presence. **Offered in summer semester only.**

CIS 251 C++ Programming 3-0-3
This course is an introduction to the C++ programming language including object oriented programming. Topics include: problem solving and design; control structures; objects and events; user interface construction; and document and program testing.

CIS 255 JAVA Programming 3-0-3
This course is an introduction to the Java programming language. Topics in this course include object-oriented programming constructs, Web page applet development, class definitions, threads, events and exceptions. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

CIS 261 COBOL Programming 3-0-3
**PREREQUISITE:** Previous CIS course.
This course is an introduction to the COBOL programming language. Included are structured programming techniques, report preparation, arithmetic operations, conditional statements, group totals, and table processing. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

CIS 268 Software Support 3-0-3
**PREREQUISITE:** CIS146.
This course provides students with hands-on practical experience in installing computer software, operating systems, and trouble-shooting. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. This course is a suitable substitute for CIS 239, Networking Software. This course is a CIS elective. Offered on the Shoals Campus only.

CIS 269 Hardware Support 3-0-3
**PREREQUISITE:** CIS146.
This course provides students with hands-on practical experience in installation and troubleshooting computer hardware. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. This is a suitable substitute for CIS 240, Networking Hardware. Offered on the Shoals Campus only.

CIS 280 Network Security 3-0-3
This course provides a study of threats to network security and methods of securing a computer network from such threats. Topics included in this course are security risks, intrusion detection, and methods of securing authentication, network access, remote access, Web access, and wired and wireless network communications. Upon completion students will be able to identify security risks and describe appropriate counter measures. **This class is taught only in the summer.**

CIS 281 System Analysis and Design 3-0-3
This course is a study of contemporary theory and systems analysis and design. Emphasis is placed on investigating, analyzing, designing, implementing, and documenting computer systems. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. **Offered in summer semester only.**

CIS 282 Computer Forensics 3-0-3
This course introduces students to methods of computer forensics and investigations. This course helps prepare students for the International Association of Computer Investigative Specialists (IACIS) certification. Offered on the Shoals Campus only.

CIS 284 CIS Internship 0-3-3
**PREREQUISITE:** Permission of instructor.
This course is designed to provide the student with an opportunity to work in a degree/program related environment. Emphasis is placed on the student’s “real world” work experience as it integrates academics with practical applications that relate meaningfully to careers in the computer discipline. Significance is also placed on the efficient and accurate performance of job tasks as provided by the “real world” work experience. Grades for this course will be based on a combination of the employer’s evaluation of the student, and the contents of a report submitted by the student. Upon completion of this course, the student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to a “real world” work experience.

CIS 291 Case Study in Computer Science 3-0-3
**PREREQUISITE:** CIS281 or Permission of instructor.
This course is a case study involving the assignment of a complete system development project for analysis, programming, implementation, and documentation. Topics include planning system analysis and design, programming techniques, coding and documentation. Upon completion, students should be able to design, code, test and document a comprehensive computer information system.

*CIS 299 Directed Studies in Computer Science 3-0-3
**PREREQUISITE:** Permission of instructor.
This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to or at the beginning of the class. Upon completion, the student will be able to demonstrate knowledge of the topics as specified by the instructor. This course is a CIS elective.
Computer Numerical Control (CNC)

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

CNC 227 Introduction to Statistical Process Control 3-0-3
This is an introduction course in statistical process control of manufacturing processes. Topics include control charts, pareto diagrams, and cause-effect diagrams. Upon completion, students are expected to perform basic functions in analysis and control of manufacturing processes.

CNC 230 Computer Numerical Control Special Topics 0-3-1
This course is designed to allow students to work in the lab with limited supervision. The student is to enhance their proficiency levels on various CNC machine tools. Upon completion, students are expected to plan, execute, and present results of advanced CNC products.

Communication Skills (COM)

+COM 100 Introductory Technical English I 3-0-3
PREREQUISITE: Satisfactory placement score.
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 with substantial focus on occupational performance requirements. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

+Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Cosmetology (COS)*

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

COS 111 Introduction to Cosmetology 3-0-3
COREQUISITE: COS 112
This course is designed to provide students with an overview of the history and development of cosmetology and standards of professional behavior. Students receive basic information regarding principles and practices of infection control, diseases, and disorders. Additionally students receive introductory information regarding hair design. The information presented in this course is enhanced by hands-on application performed in a controlled lab environment. Upon completion, students should be able to apply safety rules and regulations and write procedures for skills identified in this course.

COS 112 Introduction to Cosmetology Lab 0-9-3
COREQUISITE: COS 111
In this course, students are provided the practical experience for sanitation, shampooing, hair shaping, and hairstyling. Emphasis is placed on disinfection, shampooing, hair shaping, and hairstyling for various types of hair for men and women.

This course offers opportunities for students to put into practice concepts learned in the theory component from COS 111.

COS 113 Theory of Chemical Services 3-0-3
COREQUISITE: COS 114
During this course, students learn concepts of theory of chemical services related to the chemical hair texturing. Specific topics include basics of chemistry and electricity, properties of the hair and scalp, and chemical texture services. Safety considerations are emphasized throughout this course. This course is foundational for other courses providing more detailed instruction on these topics.

COS 114 Chemical Services Lab 0-9-3
COREQUISITE: COS 113
During this course students perform various chemical texturing activities. Emphasis is placed on cosmetologist and client safety, chemical use and handling, hair and scalp analysis, and client consulting.

COS 115 Hair Coloring Theory 3-0-3
COREQUISITE: COS 116 Hair Coloring Lab
In this course, students learn the techniques of hair coloring and hair lightening. Emphasis is placed on color application, laws, levels and classifications of color and problem solving. Upon completion, the student will be able to identify all classifications of hair coloring and the effects on the hair.

COS 116 Hair Coloring Lab 0-9-3
COREQUISITE: COS 115 Hair Coloring Theory
In this course, students apply hair coloring and hair lightening techniques. Topics include consultation, hair analysis, skin test and procedures and applications of all classifications of hair coloring and lightening. Upon completion, the student will be able to perform procedures for hair coloring and hair lightening.

COS 117 Basic Spa Techniques 3-9-3
COREQUISITE: COS 118 Basic Spa Techniques Lab
This course is the study of cosmetic products, massage, skin care, and hair removal, as well as identifying the structure and function of various systems of the body. Topics include massage skin analysis, skin structure, disease and disorder, light therapy, facials, facial cosmetics, anatomy, hair removal, and nail care. Upon completion, the student will be able to state procedures for analysis, light therapy, facials, hair removal, and identify the structures, functions, disorders of the skin, and nail care.

COS 118 Basic Spa Techniques Lab 0-9-3
COREQUISITE: COS 117 Basic Spa Techniques
This course provides practical applications related to the care of the skin and related structure. Emphasis is placed on facial treatments, product application, skin analysis, massage techniques, facial make-up, hair removal, and nail care. Upon completion, the student should be able to prepare clients, assemble sanitized materials, follow procedures for product application, recognize skin disorders, demonstrate facial massage movement, cosmetic application, and hair removal using safety and sanitary precautions, and nail care.

COS 123 Cosmetology Salon Practices 0-9-3
This course is designed to allow students to practice all phases of cosmetology in a salon setting. Emphasis is placed on professionalism, receptionist duties, hair styling, hair shaping, chemical, and nail and skin services for clients. Upon completion, the student should be able to demonstrate professionalism and the procedures of cosmetology in a salon setting.
COS 127  Esthetics Theory  3-0-3
This course includes an advanced study of anatomy and physiology relating to skin care, cosmetic chemistry, histology of the skin, and massage and facial treatments. Upon completion, the student should be able to discuss the functions of the skin, effects of chemicals on skin, different types of massage and benefits, and key elements of the basic facial treatment.

COS 134  Advanced Esthetics  1-6-3
This course includes an advanced study of anatomy and physiology relating to skin care, cosmetic chemistry, histology of the skin, and massage and facial treatments. Upon completion, the student should be able to discuss the functions of the skin, effects of chemicals on skin, different types of massage and benefits, and key elements of the basic facial treatment.

COS 135  Advanced Esthetics Applications  0-9-3
This course provides advanced practical applications related to skin care. Principal topics include massage techniques, various facial treatments, proper product application through skin analysis, and introduction to ingredients and treatments used by the esthetician. Upon completion, the student should be able to perform various massage techniques, prescribe proper type of facial treatment and product, and demonstrate facials using any of the eight functions of the facial machine.

COS 143  Specialty Hair Preparation Techniques  1-6-3
This course focuses on the theory and practice of hair designing. Topics include creating styles using basic and advanced techniques of back combing, up sweeps and braiding. Upon completion, students should be able to demonstrate the techniques and procedures for hair designing.

COS 144  Hair Shaping and Design  1-6-3
In this course, students learn the art and techniques of hair shaping. Topics include hair sectioning, correct use of hair shaping implements, and elevations used to create design lines. Upon completion, the student should be able to demonstrate the techniques and procedures for creating hair designs.

COS 145  Hair Shaping Lab  0-9-3
This covers the study of the art and techniques of hair shaping. Topics include hair sectioning, correct use of hair shaping implements, and elevations used to create design lines. Upon completion, the student should be able to demonstrate the techniques and procedures for creating hair designs using safety and sanitary precautions.

COS 162  Special Topics in Cosmetology  0-9-3
This course is designed to allow students to explore issues relevant to the profession of cosmetology. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

COS 163  Facial Treatments  1-6-3
This course includes all phases of facial treatments in the study of skin care. Topics include treatments for oily, dry, and special skin applications. Upon completion, students will be able to apply facial treatments according to skin type.

COS 164  Facial Machine  0-9-3
This is a course designed to provide practical experience using the vapor and facial machine with hydraulic chair. Topics include the uses of electricity and safety practices, machine and apparants, use of the magnifying lamp, and light therapy. Upon completion the student will be able to demonstrate an understanding of electrical safety and skills in the use of facial machines.

COS 165  Related Subjects Estheticians  0-9-3
This course includes subjects related to the methods for removing unwanted hair. This course includes such topics as electrolysis information and definitions, safety methods of permanent hair removal, the practice of removal of superfluous hair, and the use of depilatories. Upon completion of this course, students will be able to apply depilatories and practice all safety precautions.

COS 166  Skin Care Bacteriology and Sanitation  3-0-3
This course introduces students to bacteriology and sanitation of skin care implements. Emphasis is placed on decontamination, infection control, and safety. At the end of this course students will be able to describe practices for sanitizing facial implements and proper use and disposal of non-reusable items.

COS 167  State Board Review  1-6-3
Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the practical skills necessary to complete successfully the required State Board of Cosmetology examination and entry-level employment. (Esthetics Only)

COS 168  Bacteriology and Sanitation  1-6-3
In this skin care course, emphasis is placed on the decontamination, infection control and safety practiced in the esthetics facility. Topics covered include demonstration of sanitation, sterilization methods and bacterial prevention. Upon completion, the student will be able to properly sanitize facial implements and identify non-reusable items.

COS 169  Skin Functions  0-9-3
This course introduces skin functions and disorders. Topics include practical application for skin disorder treatments, dermabrasion, and skin refining. Upon completion of this course, the student will be able to demonstrate procedures for acne, facials and masks for deeper layers and wrinkles.

COS 181  Special Topics  0-9-3
This course is designed to allow students to explore issues relevant to the profession of cosmetology. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

COS 190  Internship in Cosmetology  0-9-3
This course is designed to provide exposure to cosmetology practices in non-employment situations. Emphasis is on dependability, attitude, professional judgment, and practical cosmetology skills. Upon completion, the student should have gained skills necessary for entry-level employment.

COS 291  Co-op  0-9-3
This course is designed to provide work experience with a college-approved employer in an area related to Cosmetology. The student works a minimum of 15 contact hours each week. Emphasis is placed on integrating classroom learning with related work experience. Registration with the AL Board of Cosmetology for a student work permit is required. Documentation on tasks and work evaluation are submitted to college instructor. Upon completion, students should be able to evaluate career selection,
demonstrate employability skills, and satisfactorily perform work-related competencies.

**Cosmetology Instructor Training (CIT)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**CIT 211 Teaching and Curriculum Development** 3-0-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience).
This course focuses on principles of teaching, teaching maturity, personality conduct, and the development of cosmetology curriculum. Emphasis is placed on teacher roles, teaching styles, teacher challenges, aspects of curriculum development, and designing individual courses. Upon completion, students should be able to describe the role of teacher, identify means of motivating students, develop a course outline, and develop lesson plans.

**CIT 212 Teacher Mentorship** 0-9-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience). COREQUISITE: CIT 211
This course is designed to provide the practice through working with a cosmetology instructor in a mentoring relationship. Emphasis is placed on communication, student assessment, and assisting students in the lab. Upon completion, students should be able to communicate with students, develop a course of study, and apply appropriate teaching methods.

**CIT 213 Lesson Plan Development** 0-9-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience). COREQUISITE: CIT 212
The course introduces students to methods for developing lesson plans. Emphasis is placed on writing lesson plans and on the four-step teaching plan. Upon completion, students should be able to write daily lesson plans and demonstrate the four-step teaching method.

**CIT 214 Lesson Plan Methods and Development** 1-6-3
During this course students have the opportunity to further apply knowledge of lesson planning and lesson delivery by using lesson plans they have developed from previous courses or this course. Emphasis is placed on the use of lesson plans in various classroom and laboratory settings. Upon completion, students will be able to teach a variety of cosmetology classes using various techniques. This course serves as a suitable substitute for CIT 221. If used as a suitable substitute, this course becomes a core course.

**CIT 221 Lesson Plan Implementation** 0-9-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience).
This course is designed to provide practice in preparing and using lesson plans. Emphasis is placed on organizing, writing, and presenting lesson plans using the four-step teaching method. Upon completion, students should be able to prepare and present a lesson using the four step teaching method.

**CIT 222 Instructional Materials and Methods** 3-0-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience). COREQUISITE: CIT 223
This course focuses on visual and audio aids and materials. Emphasis is placed on the use and characteristics of instructional aids. Upon completion, students should be able to prepare teaching aids and determine their most effective use.

**CIT 223 Instructional Materials and Methods Applications** 0-9-3
PREREQUISITE: Licensed managing cosmetologist (1 year experience). COREQUISITE: CIT 222
This course is designed to provide practice in preparing and using visual and audio aids and materials. Emphasis is placed on the preparation and use of different categories of instructional aids. Upon completion, students should be able to prepare and effectively present different types of aids for use with a four-step lesson plan.

**CIT 224 Special Topics in Cosmetology Instruction** 3-0-3
This course is designed to allow students to further develop their knowledge and skills as cosmetology instructors. Topics will be assigned based on individual student professional needs.

**Criminal Justice (CRJ)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**CRJ 100 Introduction to Criminal Justice** 3-0-3
This course surveys the entire criminal justice process from law enforcement to the administration of justice through corrections. It discusses the history and philosophy of the system and introduces various career opportunities.

**CRJ 110 Introduction to Law Enforcement** 3-0-3
This course examines the history and philosophy of law enforcement, as well as the organization and jurisdiction of local, state, and federal agencies. It includes the duties and functions of law enforcement officers.

**CRJ 116 Police Patrol** 3-0-3
This course studies the duties, and responsibilities of the uniformed police patrol. It emphasizes the importance of patrol functions and includes principles, methods, procedures and resources used in police patrol operations.

**CRJ 140 Criminal Law and Procedure** 3-0-3
This course examines both substantive and procedural law. The legal elements of various crimes are discussed, with attention to the Alabama Code. Areas of criminal procedure essential to the criminal justice professional are covered.

**CRJ 146 Criminal Evidence** 3-0-3
This course considers the origins of the law of evidence and current rules of evidence. Types of evidence, their definitions and uses are covered, as well as the functions of the court regarding evidence.

**CRJ 147 Constitutional Law** 3-0-3
This course involves constitutional law as it applies to criminal justice. It includes recent Supreme Court decisions affecting criminal justice professionals, such as right to counsel, search and seizure, due process and civil rights.
This course provides an introduction to the philosophical and historical foundations of corrections in America. Incarceration and some of its alternatives are considered.

This course delves into the nature and extent of crime in the United States, as well as criminal delinquent behavior and theories of causation. The study includes criminal personalities, principles of prevention, control, and treatment.

This course examines the causes of delinquency. It also reviews programs of prevention, and control of juvenile delinquency as well as the role of the courts.

This course examines the principles of organization and administration of law enforcement agencies. Theories of management, budgeting, and various personnel issues are covered.

This course explores the theory and scope of criminal investigation. The duties and responsibilities of the investigator are included. The techniques and strategies used in investigation are emphasized.

This course involves practical experience with a criminal justice agency under faculty supervision. Permission of the instructor is required. This course may be repeated with the approval of the department head.

This course involves reading, research, writing, and discussion of selected subjects relating to criminal justice. Various contemporary problems in criminal justice are analyzed. This course may be repeated with approval from the department head.

Design Engineering Technology (D&D)

Availability of courses in this program is dependent upon student enrollment. See advisor for further information.

This course provides an introduction to basic Computer-Aided Drafting and Design (CADD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic CADD and operating system functions, file manipulation, and basic CADD software applications in producing softcopy and hardcopy.

This course serves as an introduction to the field of drafting and design and provides a foundation for the entire curriculum. Topics include safety, lettering, tools and equipment, geometric constructions, and orthographic sketching, and drawing.

This course provides students with basic blueprint reading for various industrial applications. Topics include orthographic projection, dimensions and tolerances, symbols, industrial applications, scales and notes. This course may be tailored to meet a specific industry need.

This course provides the students with terms and definitions, theory of orthographic projection, and other information required to interpret drawings used in the machine trades. Topics include multiview projection, pictorial drawings, dimensions and notes, lines and symbols, and sketching. Upon completion, students should be able to interpret blueprint drawings used in the machine trades.

This course provides the students with terms and definitions, theory of orthographic projection, and other information required to interpret drawings used in the construction trades. Topics include multiview projection, dimensions and notes, lines and symbols, sketching, foundations plans, site plans, floor plans, elevations, sections, details, schedules, electrical plans and specifications. Upon completion, students should be able to interpret blueprint drawings used in the construction trades.

This course in materials and processes includes the principles and methodology of material selection, application, and manufacturing processes. Emphasis is directed to solids to include material characteristics, castings, forging, and die assemblies. Upon completion, students should be able to discuss and understand the significance of materials' properties, structure, basic manufacturing processes, and express and interpret material specifications.

This course covers the universal language of electrical drafting, including electrical lines, symbols, abbreviations, and notation. Emphasis is placed on typical components such as generators, controls, transmission networks, and lighting, heating, and cooling devices. Upon completion, students should be able to draw basic diagrams of electrical and electronic circuits using universally accepted lines and symbols.

This course covers sections, auxiliary views, and basic space geometry. Emphasis will be placed on the theory as well as the mechanics of applying sections, basic dimensioning, auxiliary views, and basic space geometry.

This course covers surface intersections and developments. Emphasis is placed on the basic types of intersections using simple geometric forms. Upon completion, students should be able to draw common types of surface intersection and handle them simply as applications of the concepts learned in this class.

This course covers intermediate-level concepts and applications of CADD. Emphasis will be placed on intermediate-level features, commands, and applications of CADD software.

This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics
include dimensioning concepts and pictorial drawings.

**DDT 130 Fundamentals of Drafting for Related Trades** 3-0-3

This course provides an overview of related technical trades drafting. Theory is covered within a broad range of drafting specialties including civil, structural, electrical, mechanical, and electronic drawing. Emphasis is placed on a basic understanding of what each of these fields require for graphic communication.

**DDT 131 Machine Drafting Basics** 1-4-3

This course in machine drafting and design provides instruction in the largest specialty area of drafting in the United States, in terms of scope and job opportunities. Emphasis will be placed on the applications of multi-view drawings, including drawing organization and content, title blocks and parts lists, assembly drawings, detail drawings, dimensioning and application of engineering controls in producing industrial-type working drawings. Upon completion, students should be able to organize, layout, and produce industrial-type working drawings, including the application of title blocks, parts lists, assemblies, details, dimensions, and engineering controls.

**DDT 132 Architectural Drafting** 1-4-3

This course in architectural design and drafting introduces basic terminology, concepts and principles of architectural design and drawing. Topics include design considerations, lettering, terminology, site plans, and construction drawings. Upon completion, students should be able to draw, dimension, and specify basic residential architectural construction drawings.

**DDT 133 Basic Surveying** 1-4-3

This course covers the use of surveying instruments, mathematical calculations and the theory of land surveying. Topics include USGS benchmarks, measuring horizontal and vertical angles and distances, terms, and recording and interpreting field notes. Upon completion, students should be able to recognize benchmarks and measure, specify, and record field notes.

**DDT 134 Descriptive Geometry** 1-4-3

This course is designed to teach the fundamental concepts of descriptive geometry through an emphasis on logical reasoning, visualization, and practical applications. Topics include orthographic projection, points and lines in space, auxiliary views, plane representation, intersecting and non-intersecting lines, piercing and intersecting planes, plane development, and calculations. Upon completion, students should be able to project and intersect points, lines, and planes, with their relationships in space, as well as develop surfaces of an object for fabrication purposes.

**DDT 139 Fundamentals of Drafting for Related Trades Lab** 0-6-3

This course is a direct applications lab to the topics covered within DDT 130. Emphasis is placed on drawing accuracy utilizing each of the fields listed with DDT 130.

**DDT 150 Theory of Residential Drawing and Design** 3-0-3

This course provides the theory of residential drawing and design. Topics include architectural styles, house design, site and space planning, environment, drawing requirements, construction materials and process, terminology, and specific types of drawings required to complete a full set of construction documents. Introductory, intermediate, and advanced topics are covered. Emphasis is placed on an understanding of the various issues and requirements essential to the field of residential drawing and design.

**DDT 155 Drawing for Residential Construction** 0-8-4

This course is a direct applications lab to the topics covered within DDT 150. Emphasis is placed upon the production of quality construction documents.

**DDT 181 Special Topics in Drafting and Design Technology** 3-0-3

These courses provide specialized instruction in various areas related to the drafting industry. Emphasis is placed on meeting students’ needs.

**DDT 181E Special Topics - Work Ethics** 3-0-3

This course provides instruction in work ethics related to Design Engineering Technology.

**DDT 182 Special Topics in Drafting and Design Technology** 3-0-3

This course provides students with opportunities to apply drafting and design concepts.

**DDT 191 Drafting Internship** 0-5-1

This course is designed for those who are involved in a structured employment situation that is directly related to the field of drafting and design and is coordinated with the drafting instructor. The student must spend at least 5 hours per week in an activity planned and coordinated jointly by the instructor and the employer. Upon completion, students should have gained valuable work experience in a well-planned, coordinated training/work situation.

**DDT 192 Drafting Internship** 0-10-2

This course is limited to those who are involved in a structured employment situation that is directly related to the field of drafting and design and is coordinated with the drafting instructor. The student must spend at least 10 hours per week in an activity planned and coordinated jointly by the instructor and the employer. Upon completion, students should have gained valuable work experience in a well-planned, coordinated training/work situation.

**DDT 193 Drafting Internship** 0-15-3

This course is limited to those who are involved in a structured employment situation that is directly related to the field of drafting and design and is coordinated with the drafting instructor. The student must spend at least 15 hours per week in an activity planned and coordinated jointly by the instructor and the employer. Upon completion, students should have gained valuable work experience in a well-planned, coordinated training/work situation.

**DDT 211 Intermediate Machine Drafting** 1-4-3

This second course in machine drafting and design provides more advanced instruction in the largest specialty area of drafting. Topics include applications of previously developed skills in the organization and development of more complex working drawings, use of vendor catalogs and the Machinery’s Handbook for developing specifications, and use of standardized abbreviations in working drawings.

**DDT 212 Intermediate Architectural Drafting** 1-4-3

This second course in architectural design and drafting continues with more advanced and detailed architectural plans. Topics include floor construction and detailing, foundation, wall, and roof construction and detailing; use of standards manuals;
perspective drawings; electrical plans; plumbing plans; and building materials, with emphasis on residential and some light commercial applications. Upon completion, students should be able to draw and specify advanced-level plans including various architectural details.

DDT 213 Civil Drafting, Plat Maps 1-4-3
This course introduces the drafting practices, symbols, conventions, and standards utilized in civil engineering contract documents. Topics include site planning, land surveying, topographic surveys, along with civil terminology. Upon completion, students should be able to draw accurate plat maps giving legal descriptions of land parcels, draw simple site plans, and identify and use proper symbols and conventions on civil engineering drawings.

DDT 214 Pipe Drafting 1-4-3
This course covers the theory and practical application needed to understand piping fundamentals as used in refineries and petrochemical plants. Topics include process and mechanical flow diagrams, plant equipment, isometric drawings, instrumentation symbols, pipe symbols, flanges, fittings, and applications of basic math and trigonometry. Upon completion, students should be able to demonstrate pipe drafting techniques and fundamentals in order to prepare working drawings used in refineries and the petrochemical industrial environment.

DDT 215 Geometric Dimensioning and Tolerancing 1-4-3
This course is designed to teach fundamental concepts of size description by geometric methods including appropriate engineering controls. Emphasis is placed on the drawing and application of common geometric dimensioning and tolerancing symbols to engineering drawings as designated by the latest ANSI/ASME Standards. Upon completion, students should be able to use geometric dimensioning and tolerancing symbols in applying size information and manufacturing controls to working drawings.

DDT 216 Design of Structural Wood Members 3-0-3
This course provides structural theory and rule-of-thumb design for structural wood members. Joists, beams, girders, rafters, posts, and columns are designed as related to residential and light commercial needs. Bending moment, shear, and slenderness ratios are discussed as well as code requirements and rule-of-thumb. Emphasis is placed upon competency.

DDT 217 Building Codes, Ordinances, Zoning Restrictions and the A.D.A. 3-0-3
PREREQUISITE: Permission of the instructor. This course provides an in-depth study of building codes, municipal ordinances, zoning restrictions, and compliance with the Americans With Disability Act as related to commercial drafting and design. Emphasis is placed upon a working understanding of these topics.

DDT 220 Advanced Technical Drawing 1-4-3
This course covers the methods of providing size description and manufacturing information for production drawings. Emphasis will be placed on accepted dimensioning and tolerancing practices including Geometric Dimensioning and Tolerancing for both the Customary English system and the ISO System. Upon completion, students should be able to apply dimensions, tolerances, and notes to drawings to acceptable standards, including Geometric Dimensioning and Tolerancing, and produce drawings using and specifying common threads and various fasteners, including welding methods.

DDT 222 Advanced Architectural Drafting 1-4-3
This third course in architectural design and drafting continues with advanced architectural plans, including a slant toward light commercial construction. Topics include climate control plans, application of building codes, building materials and finish specifications, cost estimating, and bid specifications. Upon completion, students should be able to apply current techniques in producing advanced-level architectural plans, including residential and light commercial applications.

DDT 224 Structural Concrete Drafting 1-4-3
This course is designed to develop the knowledge and skills necessary to understand the basic components and terminology of pre-cast and poured-in-place concrete structures. Emphasis is placed on pre-cast concrete framing plans, sections, fabrication and connection details, poured-in-place concrete foundations, floor systems, and bills of material. Upon completion, students should be able to construction engineering and shop drawings of concrete beams, columns, floor, rood, and wall framing plans using the A.I.S.C. Manual and incorporating safety practices.

DDT 225 Structural Steel Drafting 1-4-3
This course covers the theory and practical applications necessary to understand the basic design and terminology of structural steel components used in light commercial buildings. Emphasis is placed on structural steel drafting techniques, bolted and welded connections, framing plans, sections, fabrication and connection details, and bills of material. Upon completion, students should be able to produce engineering and shop drawings incorporating standard shapes, sizes, and details using the A.I.S.C. Manual and incorporating safety practices.

DDT 226 Technical Illustration 1-4-3
This course provides the student with various methods of illustrating structures and machine parts. Topics include axonometric drawings; exploded assembly drawings; one point, two point, and three point perspectives, surface textures, and renderings. Upon completion, students should be able to produce drawings and illustrations using the previously described methods.

DDT 227 Strength of Materials 4-0-4
This course in statics and strength of materials includes the study of forces and how they act and react on bodies and structures. Topics include the effects of forces as found in structures and machines under conditions of equilibrium, how materials resist forces, strengths of common construction materials and structural components. Force systems such as parallel, concurrent, and non-current are studied in coplanar and non-coplanar situations are included. Upon completion, student should understand and be able to apply the principles of force in engineering drawings.

DDT 228 Geographic Information Systems 1-4-3
This course is designed as an introduction to the world of G.I.S. and what it's about and builds on the skills attained in Civil Drafting I and II. Emphasis will be placed on utilizing G.I.S. software in conjunction with a CAD program to produce "intelligent" maps tied to a database in solving complex projects and problems. Upon completion, students should be able to manipulate attributed objects drawn on CAD/GIS software and accurately produce basic G.I.S. drawings.
DDT 231  Advanced CAD  1-4-3
This course covers the advanced applications of CAD software to engineering projects in various applications, including architectural, civil, mechanical, and environmental engineering, with consideration for advanced physical and psychological principle of CAD. These principles will be applied toward CAD customization and programming principles, for the expressed purpose of increasing productivity and improving the performance of the CAD operator, thereby, making CAD much more productive in an engineering environment. Emphasis will be place on using intelligent CAD techniques to increase the quality of output. And, 3D modeling and rendering will be introduced. Upon completion, students should be able to apply advanced CAD techniques in solving complex problems related to all engineering applications.

DDT 232  CAD Customization  1-4-3
This course introduces the various methods of customizing CAD software to meet individual or company needs. Topics include menu customizing, programing, custom command macros, script files, slides, and slide libraries. Upon completion, students should be able to customize and write menus, write programming routines, and write script files for the purpose of increasing the proficiency of the CAD operator.

DDT 233  Solids Modeling  1-4-3
This course provides instruction in 3D Design Modeling utilizing the 3D capabilities of CAD software. Emphasis is placed on 3D wire-frame, surface and solids modeling along with the development of 2D detail drawings from 3D models.

DDT 234  3D Graphics and Animation  1-4-3
This course is design to challenge the imagination of the student in a 3-dimensional problem solving environment. The student will be given a basic introduction to the concepts of 3D design and animation then apply those concepts to a design project. Upon completion, students should be able to create and animate objects in a 3-dimensional environment.

DDT 235  Specialized CAD  1-4-3
This course allows the student to plan, execute, and present results of individual projects in Specialized CAD topics. Emphasis is placed on enhancing skill attainment in Specialized CAD skill sets. The student will be able to demonstrate and apply competencies identified by the instructor.

DDT 236  Design Project  1-4-3
This course is designed for advanced students who aspire to more advanced and specialized skills in one certain drafting area. Emphasis will be place on the student's ability to apply the principles learned in previous drafting classes in one special area, as approved by the instructor. The required project must be agreed upon by the instructor and the student, as well as how the work is to be accomplished. Upon completion, students should further reinforce previously learned concepts by applying engineering principles and controls to a personal design project.

DDT 237  Current Topics in CAD  1-4-3
This course serves to introduce changing technology and current CAD subjects and software and the computing hardware needed to utilize new products. Topics include current trends in how industries use CAD applications, new developments, improvements and progressions within specific CAD applications as well as the necessary hardware. Upon completion, students should be able to use more updated software in a specific CAD application and be more aware of improvements in CAD software and how to apply advancing technology in improving their CAD proficiency.

DDT 238  Special Topics in CAD  1-4-3
This course in special CAD and multimedia topics covers special capabilities possible with CAD software, especially in conjunction with other graphical software, such as virtual "walk-throughs" or multimedia presentations. Topics include but are not limited to combining CAD software, image editing software, authoring software, and 3D software into one harmonious relationship to produce multimedia presentations. Upon completion, students should be aware of and understand how to utilize several software packages to produce multimedia presentations.

DDT 239  Independent Studies  0-6-3
This course provides practical application of prior attained skills and experiences as selected by the instructor for the individual student. Emphasis is placed on applying knowledge from prior courses toward the solution of individual drafting and design problems. Upon completion, students will demonstrate the application of previously attained skills and knowledge in the solution of typical drafting applications and problems.

DDT 250  Theory of Commercial Drawing and Design  3-0-3
This course provides the theory of commercial drawing and design. Topics include legal issues, job expectations, the architect and the architectural office, the contractor and the office of the contractor, building officials, construction materials and process, fire resistance design, C.S.I. format, and contract documents. Emphasis is placed upon a thorough understanding of these topics.

DDT 255  Drawing for Commercial Construction  0-8-4
This course is a direct applications to the topics covered within DDT 250. Emphasis is placed upon the production of quality construction document.

DDT 290  Survey of Aerospace Technology  3-0-3
This course provides a survey of Aerospace technology including the history of spaceflight, propulsion, orbital mechanics, and the space environment. A discussion of unmanned spacecraft and the manned space program is also included, as well as debate about the future, with solid facts and some speculation about humankind's ventures in the final frontier.

Economics (ECO)

ECO 231  Principles of Macroeconomics  3-0-3
This course is an introduction to macroeconomic theory, analysis, and policy applications. Topics include the following: scarcity, demand and supply, national income analysis, major economic theories concerning monetary and fiscal policies as stabilization measures, the banking system, and other economic issues or problems including international trade.

ECO 232  Principles of Microeconomics  3-0-3
This course is an introduction of the microeconomic theory, analysis, and applications. Topics include scarcity; the theories of consumer behavior, production and cost, markets, output and resource pricing, and international aspects of microeconomics.
**Electrical Technology (ELT)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**ELT 108 DC Fundamentals** 1-2-3
This course is designed to provide students with a working knowledge of basic direct current (DC) electrical principles. Topics include safety, basic atomic structure and theory, magnetism, conductors, insulators, use of Ohm’s law to solve for voltage, current, and resistance, electrical sources, power, inductors, and capacitors. Students will perform lockout/tagout procedures, troubleshoot circuits and analyze series, parallel, and combination DC circuits using the electrical laws and basic testing equipment to determine unknown electrical quantities.

**ELT 109 AC Fundamentals** 1-2-3
This course is designed to provide students with a working knowledge of basic alternating current (AC) electrical principles. Topics include basic concepts of electricity, electrical components, basic circuits, measurement instruments, the laws of alternating current, and electrical safety with lockout procedures. Hands on laboratory exercises are provided to analyze various series, parallel, and combination alternating current circuit configurations containing resistors, inductors, and capacitors. Upon course completion, students will be able to describe and explain alternating current circuit fundamentals such as RLC circuits, impedance, phase relationships, and power factors. They should also be able to perform fundamental tasks associated with troubleshooting, repairing, and maintaining industrial AC systems.

**ELT 110 Wiring Methods** 1-2-3
This course is a study of various tasks, wiring methods, materials, and associated NEC requirements that students will be required to work with in residential and commercial wiring courses.

**ELT 114 Residential Wiring Methods** 2-3-3
This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations.

**ELT 115 Residential Wiring Methods II** 2-3-3
This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations.

**ELT 117 AC/DC Machines** 1-6-3
This course covers the theory and operation of DC motors, single and three phase AC motors, and the labs will reinforce this knowledge. Emphasis is placed on the various types of single and three phase motors, wiring diagrams, starting devices, and practical application in the lab.

**ELT 118 Commercial/Industrial Wiring I** 1-6-3
This course focuses on principles and applications of commercial and industrial wiring. Topics include electrical safety practices, an overview of National Electric Code requirements as applied to commercial and industrial wiring, conduit bending, circuit design, pulling cables, transformers, switch gear, and generation principles.

**ELT 122 Advanced AC and DC Machines** 2-3-3
This course focuses on single and three-phase motors and introduces students to DC motors. Emphasis is placed on field wiring various types of AC and DC motors, troubleshooting procedures, and utilization of test equipment. Upon completion, students should be able to explain, wire, troubleshoot, and test all types of AC and DC electric motors.

**ELT 132 Commercial/Industrial Wiring II** 2-3-3
This course is a continuation of ELT 118 and is all inclusive. Including the study of branch circuits, installation requirements for services, feeders and special equipment considerations including the NEC code requirements. Emphasis is placed on load calculations, conductors, service sizing, installation requirements, NEC code requirements, transformers, lighting, HVAC and special equipment considerations. Upon completion, students should be able to know how to size complete electrical commercial/industrial systems and know the NEC requirements for each system.

**ELT 181 Special Topics in ELT Technology** 3-0-3
These courses provide specialized instruction in various areas related to electrical technology. Emphasis is placed on meeting students’ needs.

**ELT 209 Motor Controls I** 1-6-3
This course covers the use of motor control symbols, magnetic motor starters, running overload protection, push-button stations, sizing of magnetic motor starters and overload protection, and complex ladder diagrams of motor control circuits. Topics include sizing magnetic starters and overload protection, the use of push-button stations, ladder diagrams and magnetic motor starters in control of electric motors, wye-delta starting, part start winding, resistor starting and electric starting devices. Upon completion, students should be able to understand the operation of motor starters, overload protection, interpret ladder diagrams using push-button stations and understand complex motor control diagrams.

**ELT 212 Motor Controls II** 2-3-3
This course covers complex ladder diagrams of motor control circuits and the uses of different motor starting techniques. Topics include wye-delta starting, part start winding, resistor starting and electronic starting devices. Upon completion, the students should be able to understand and interpret the more complex motor control diagrams and understand the different starting techniques of electrical motors.

**ELT 219 Fluid Power Systems** 2-3-3
This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems.

**ELT 231 Programmable Controls I** 2-3-3
This state-of-the-art course includes the fundamental principals of programmable logic controls (PLCs) including hardware and programming. Emphasis is placed on but not limited to the following: hardwiring associated with the PLC, different options available with most PLCs and basic ladder logic programming. Upon completion, students must demonstrate their ability by developing programs, loading programs into real world PLCs and troubleshooting the system if necessary.
ELT 232  Programmable Controls II  2-3-3
This state-of-the-art course includes the principles of PLC’s including hardware, programming and program design. Emphasis is placed on, but not limited to the following: developing working programs, timers, counters, different special functions, and designing programs from existing hardwired systems. Upon completion, students must demonstrate their ability by developing programs, loading programs into real world PLCs and troubleshooting the system if necessary.

ELT 241  National Electric Code  3-0-3
This course introduces the students to the National Electric Code and text and teaches the student how to find needed information within this manual. Emphasis is placed on locating and interpreting needed information within the NEC code manual. Upon completion, students should be able to locate, with the NEC code requirements for a specific electrical installation.

ELT 242  Journeyman Master Prep Exam  3-0-3
This course is designed to help prepare a student to take either the Journeyman or Master Certification Exam. Emphasis is placed on review of electrical concepts and/or principles, practice tests, and test taking procedures. Upon completion, students should be able to pass the Journeyman/Masters Certifying Exam.

ELT 244  Conduit Bending and Installation  2-1-3
This course provides students the knowledge to properly bend electrical metallic tubing, rigid galvanized and intermediate metal conduit, and PVC conduit. Emphasis is placed on the theory and practical application of conduit bending methods. Upon completion, students should be able to get measurements, layout, and successfully bend conduit using hand type, mechanical, and hydraulic benders.

Emergency Medical Services  
(EMS) (EMP)

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

EMS 100  Cardiopulmonary Resuscitation I  1-0-1
This course provides students with concepts as related to areas of basic life support to include coronary artery disease, prudent heart living, symptoms of heart attack, adult one-and-two rescuer CPR, first aid for choking, pediatric basic life support, airway adjuncts, EMS system entry access, automated external defibrillation (AED), and special situations for CPR. Upon course completion, students should be able to identify situations requiring action related to heart or breathing conditions and effectively implement appropriate management for each condition. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 101  Cardiopulmonary Resuscitation II  1-0-1
This course provides students with a review of concepts learned in EMS-100. In addition, the course provides the student with theory and application of airway adjuncts as utilized with airway obstruction and maintenance as well as respiratory and cardiac arrest. Assessment and management of acute ischemic stroke will also be included. Upon course completion, students should be able to identify situations requiring action related to heart or breathing conditions and effectively implement appropriate management for these conditions. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 103  First Aid/CPR  1-0-1
This course provides a study of basic first aid and cardiopulmonary resuscitation (CPR). Students will be able to perform basic first aid and CPR techniques. Upon completion, the student will be eligible for CPR certification testing.

EMS 104  First Aid for Students of Health Related Professions  1-0-1
This course is designed for students who plan to enter a health related profession and provides educational concepts related to first aid for various health disciplines. The course includes instruction in the emergency administration of oxygen, use of airway adjuncts, medication administration techniques, equipment for mechanical breathing, suctioning techniques, and automated external defibrillation (AED). Upon course completion, students should have the ability to recognize emergency situations requiring immediate action and appropriately manage these situations.

EMS 105  First Responder  3-0-3
This course provides theory in emergency procedures as contained in the current National Standard Training Curriculum (NSTC) for the First Responder. The course is an introduction to the emergency medical services system and provides fundamentals for students to improve the quality of emergency care provided as the first person to an emergency scene until emergency medical services arrive. Completion of specific student competencies, as outlined in the current NSTC for the First Responder, is required for successful course completion.

EMS 106  Medical Terminology for Health Professions  2-0-2
This course provides students with a survey of words, terms, and descriptions commonly used in health related professions. The course includes spelling, pronunciation, and meaning of prefixes, suffixes, roots, and terms. Students may have the opportunity to utilize computer assisted instruction for learning various medical terms. Upon course completion, students should have the knowledge to associate a variety of medical terms with their meaning and utilize medical terms to effectively communicate with other health professionals.

EMS 107  Emergency Vehicle Operator Ambulance  1-0-1
The Emergency Vehicle Operator Course - Ambulance provides the student with training as contained in the current National Standard Training Curriculum (NSTC) for the Emergency Vehicle Operator Course (EVOC) Ambulance. The course provides the knowledge and skill practice necessary for individuals to learn how to safely operate all types of ambulances. Topics include introduction to the NSTC for ambulance operators; legal aspects of ambulance operation; communication and reporting; roles and responsibilities; ambulance types and operation; ambulance inspection, maintenance, and repair; navigation and route planning; basic maneuvers and normal operating situations; operations in emergency mode and unusual situations, special considerations in safety; and the run. Completion of specific student competencies, utilizing NSTC guidelines, are required.
for successful completion of this course. NOTE: To qualify for licensure status as an ambulance driver in the State of Alabama, students must successfully complete this course and meet additional requirements as required by the Alabama Department of Public Health.

EMS 108 Directed Studies in EMS - I 1-0-1
This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student’s interest and need. Specific cognitive competencies required by the student are defined in writing at the first class period.

EMS 113 Infection Control for Health Professions 1-0-1
This course is designed for students planning to enter a health related field of study or public service occupations. The course focuses on the sources of communicable diseases and describes methods for prevention of transmission of bloodborne and airborne pathogens. Topics include prevention; universal precautions (body-substance isolation) and asepsis; immunization; exposure control; disposal; labeling; transmission; exposure determination; post-exposure reporting; and an exposure control plan. The course is taught following current guidelines set forth by the Occupational Safety and Health Administration (OSHA). Upon course completion, students should be able to participate in the clinical setting, identify potential sources of bloodborne and air borne pathogens, and use appropriate universal precautions.

EMS 118 Emergency Medical Technician 6-3-9
This course is required to apply for certification as an Emergency Medical Technician. This course provides students with insights into the theory and application of concepts related to the profession of emergency medical services. Specific topics include: EMS preparatory, airway maintenance, patient assessment, management of trauma patients, management of medical patients, treating infants and children, and various EMS operations. This course is based on the NHTSA National Emergency Medical Services Education Standards.

EMS 119 Emergency Medical Technician Clinical 0-1-1
This course is required to apply for certification as an EMT. This course provides students with clinical education experiences to enhance knowledge and skills learned in the EMS 118, Emergency Medical Technician Theory and Lab. This course helps students prepare for the National Registry Exam.

EMS 120 Vehicle Extrication 2-0-2
This course provides students with theory in the development of concepts related to the removal of persons from damaged vehicles. Topics include gaining access, stabilization, packaging, patient removal, and basic hazardous situations. Upon completion, students should be able to effectively extricate a person from a wrecked vehicle.

EMS 125 High Angle Rescue - I 2-0-2
This course provides students with theory in the introduction to high angle rescue techniques. Topics include the high angle environment; equipment and protection, care and use of rope and related equipment, knots, rappelling, and ascending techniques; and introduction to rescue techniques. Upon course completion, students should have an understanding in the basic techniques of high angle rescue.

EMS 126 High Angle Rescue - II 2-0-2
This course is a continuation and review of EMS 125 and provides students with theory in rescue techniques utilized in rope rescue. Topics include one person rescue techniques, slope evacuation, high angle lowering, hauling systems, high lines, and evacuation operations. Upon course completion, students should have an understanding of how to approach a high angle rescue, utilizing various rigging techniques.

EMS 150 24 Hour EMT Refresher 2-0-2
This course provides students with theory in review of the current National Standard Training Curriculum (NSTC) for the EMT-Basic. It also serves as a transition or bridge course when a new national curriculum is adopted. This course contains specific content areas as defined by the NSTC. Students are required to complete specific competencies, as outlined by the NSTC, for successful course completion.

EMS 155 Advanced Emergency Medical Technician 5-3-8
COREQUISITE: EMS 156
This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course introduces the theory and application of concepts related to the profession of the AEMT. The primary focus of the AEMT is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Topics include: extending the knowledge of the EMT to a more complex breadth and depth, intravenous access and fluid therapy, medication administration, blind insertion airway devices, as well as the advanced assessment and management of various medical illnesses and traumatic injuries. This course is based on the NHTSA National Emergency Medical Services Education Standards. Requires licensure or eligibility for licensure at the EMT level and EMS 156 must be taken as a co-requisite.

EMS 156 Advanced Emergency Medical Technician Clinical 0-2-2
COREQUISITE: EMS 155
This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course provides students with clinical education experiences to enhance knowledge and skills learned in EMS 155. This course helps prepare students for the National Registry AEMT Exam. The student will have the opportunity to use the basic and advanced skills of the AEMT in the clinical and field settings under the direct supervision of licensed healthcare professionals. Requires licensure or eligibility for licensure at the EMT level and EMS 155 must be taken as a co-requisite.

EMS 189 Applied Anatomy and Physiology for the Paramedic 4-0-4
*EMS 189 or BIO 201 is a prerequisite for the Paramedic course.
This course introduces human anatomy and physiology and includes concepts related to basic chemistry; fluid, electrolyte, and acid-base balance; functions of cells, tissues, organs, and systems; pathophysiology; and associated medical terminology. Emphasis is placed on applying content to signs, symptoms, and treatments; and situations commonly seen by paramedics. Upon course completion, students should be able to demonstrate a basic understanding of the structure and function of the human body.
EMS 218 Supervised Studies in EMS - I 1-0-1
This course offers various topics of interest and need in emergency medical services. The course is conducted and completed under faculty supervision and includes required student cognitive competencies. Upon course completion, students should have a greater understanding of their assigned course topic.

EMS 219 Supervised Studies in EMS - II 1-0-1
This course offers various topics of interest and need in emergency medical services. The course is conducted and completed under faculty supervision and includes required student cognitive competencies. Upon course completion, students should have a greater understanding of their assigned course topic.

EMS 234 Decision Making and Problem Solving in EMS 3-0-3
This course provides students with concepts relating to problem solving and decision making. Topics include decision making in the emergency and non-emergency setting, group dynamics and group-think phenomenon. Upon course completion, students should be able to begin to use critical thinking skills to solve problems and make appropriate decisions.

EMS 240 Paramedic Operations 1-1-2
PREREQUISITE: EMS 189 or BIO 201.
This course focuses on the operational knowledge and skills needed for safe and effective patient care within the paramedic’s scope of practice. Content areas include: research, paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communications, medical terminology, life span development, ambulance operations, medical incident command, rescue awareness and operations, hazardous materials incidents, crime scene awareness, and Alabama EMS laws and rules.

EMS 241 Paramedic Cardiology 2-1-3
This course introduces the cardiovascular system, cardiovascular electrophysiology, and electrocardiographic monitoring. This course further relates pathophysiology and assessment finding to the formulation of field impressions and implementation of treatment plans for specific cardiovascular conditions. Content areas include: cardiovascular anatomy and physiology, cardiovascular electrophysiology, electrocardiographic monitoring, rhythm analysis, and prehospital 12-lead electrocardiogram monitoring and interpretation, assessment of the cardiovascular patient, pathophysiology of cardiovascular disease and techniques of management including appropriate pharmacologic agents and electrical therapy.

EMS 242 Paramedic Patient Assessment 2-1-3
This course provides the knowledge and skills needed to perform a comprehensive patient assessment, make initial management decisions, and to communicate assessment findings and patient care verbally and in writing. Content areas include: airway management, history taking, techniques of the physical examination, patient assessment, clinical decision making, communications, documentation and assessment based management.

EMS 243 Paramedic Pharmacology 0-0-1
This course introduces basic pharmacological agents and concepts with an emphasis on drug classifications and the knowledge and skills required of a paramedic for safe, effective medication administration. Content areas include: general principles of pharmacology and pharmacologic pathophysiology; venous and intraosseous access techniques, the metric and apothecary system; computation of dosage and solution problems, administration of pharmacologic agents; pharmacokinetics and pharmacodynamics, and nasogastric tube placement.

EMS 244 Paramedic Clinical I 0-1-1
This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of patient situations in the clinical setting, with a focus on patient assessment and management, advanced airway management, electro-therapy, I.V./I.O. initiation and medication administration.

EMS 245 Paramedic Medical Emergencies 2-1-3
This course relates pathophysiology and assessment finding to the formulation of field impressions and implementation treatment plans for specific medical conditions. Content areas include: pulmonology, neurology, gastroenterology, toxicology, hematology, environmental conditions, infectious and communicable diseases, abuse and assault, patients with special challenges, and acute interventions for the chronic care patient.

EMS 246 Paramedic Trauma Management 2-1-3
This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include the pathophysiology, assessment, and management of trauma as related to: trauma systems; mechanisms of injury; hemorrhage and shock; soft tissue injuries; burns; and head, facial, spinal, thoracic, abdominal, and musculoskeletal trauma.

EMS 247 Paramedic Special Populations 1-1-2
This course relates pathophysiology and assessment finding to the formulation of field impressions and implementation of treatment plans for specific medical conditions. Content areas include: endocrinology, allergies and anaphylaxis, behavioral/psychiatric conditions, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. In the clinical setting, theory and skills are applied to a variety of medical situations across the life span of the patient, with a focus on communication with and management of cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges.

EMS 248 Paramedic Clinical II 0-3-3
This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of medical and trauma situations across the life span of the patient, with a focus on communication with and management of trauma, cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges.

EMS 250 EMS Advanced Studies - I 3-0-3
This course offers theory and computer assisted instruction under faculty supervision in a paramedic educational subject relevant to the student’s need. Specific cognitive objectives must be met by the student for successful course completion.
EMS 251 EMS Advanced Studies - II 3-0-3
This course offers theory and computer assisted instruction under faculty supervision in a paramedic educational subject relevant to the student’s need. Specific cognitive objectives must be met by the student for successful course completion.

EMS 252 EMS Advanced Studies - III 3-0-3
This course offers theory and computer assisted instruction under faculty supervision in a paramedic educational subject relevant to the student’s need. Specific cognitive objectives must be met by the student for successful course completion.

EMS 253 Paramedic Transition to the Workplace 1-1-2
This course is designed to meet additional state and local educational requirements for paramedic practice. Content may include: prehospital protocols, transfer medications, topics in critical care and transport, systems presentation, and/or national standard certification courses as dictated by local needs or state requirements.

EMS 254 Advanced Competencies for Paramedic 1-1-2
This course is designed to assist students in preparation for the paramedic licensure examination. Emphasis is placed on validation of knowledge and skills through didactic review, skills lab performance, and/or computer simulation and practice testing. Upon course completion, students should be sufficiently prepared to sit for the paramedic licensure examination.

EMS 255 Paramedic Field Preceptorship 0-5-5
This course provides filed experiences in the prehospital setting with advanced life support EMS units. Under the direct supervision of a field preceptor, students synthesize cognitive knowledge and skills developed in the skills laboratory and hospital clinical to provide safe and effective patient care in the prehospital environment. Upon course completion, students should have refined and validated their patient care practices to provide safe and effective patient care over a broad spectrum of patient situations and complaints.

EMS 256 Paramedic Team Leadership 0-1-1
This course is designed to evaluate students’ ability to integrate didactic, psychomotor skills, clinical, and field internship instruction to serve as a competent entry-level paramedic. This final evaluative (rather than instructional) course focuses on students’ professional attributes and integrative competence in clinical decision-making and team leadership in the prehospital setting. Upon course completion, students should have demonstrated adequate knowledge and skills, professional attitudes and attributes, clinical decision-making and team leadership abilities to effectively function as a competent entry-level paramedic.

EMS 257 Basic Trauma Life Support Provider 1-0-1
This course provides students with theory and demonstration in advanced trauma care and management. Content areas include mechanism of trauma, trauma assessment, airway-breathing-circulation management, trauma to various portions of the body, multiple system trauma, and load-and-go situations. The course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 259 Pediatric Medical Life Support 1-0-1
This course provides students with theory and simulated case studies in pediatric care. Content areas include recognition of pediatric pre-arrest conditions; shock; basic life support; oxygenation and airway control; newborn resuscitation; essentials in pediatric resuscitation; dysrhythmia recognition and management; vascular access; and use of medications. This course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 273 EKG Interpretation 2-0-2
This course is designed for students in health related professions desiring the knowledge to interpret singular lead electrocardiograms. The course provides concepts in the interpretation of electrocardiograms to include an overview of the electrical conduction of the heart as well as the identification of all categories of dysrhythmias. Upon course completion, students should be able to identify various types of cardiac rhythms.

Energy Conservation (ECT)*
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

ECT 241 Introduction to Energy Management 1-1-2
This is an introductory course in energy management. Topics include compression principles, fan/air flow principles, energy conversions, conservation principles, and a survey of the micro computer control systems. Upon completion, students will be able to perform relevant calculations and apply energy management principles.

ECT 242 Audit-Accounting Conservation 2-1-3
This is a survey course on auditing and accounting systems relative to energy costs. Topics include principles of auditing, accounting, conservation techniques, energy costing, with emphasis on gaining insight into energy cost reductions. Upon completion, students will be able to apply auditing and accounting principles as to determine means of efficient energy use.

ECT 243 Basic Energy Management Systems 2-2-4
(ELT 231 PROGRAMMABLE CONTROLS I)
This state-of-the-art course includes the fundamental principles of programmable control logic systems (PLCs) including hardware and programming. Emphasis is placed on hardwiring associated with the PLC, different options available with most PLCs and basic ladder logic programming. Upon completion, students would be able to develop energy management programs, load programs into PLCs and trouble-shoot the system.
ECT 244 Energy Management Systems 2-2-4
(ELT 232 PROGRAMMABLE CONTROLS II)
This state-of-the-art course focuses on PLC hardware, programming and program design. Emphasis is placed on developing working programs, timers, counters, different special functions, and designing programs from existing hardwired systems. Upon completion, students should be able to develop energy management programs, load programs into PLCs and troubleshoot the system.

ECT 252 Advanced Energy Management Systems 2-2-4
(ELT 233 APPLIED PROGRAMMABLE CONTROLLERS)
This state-of-the-art course covers the more advanced topics of PLCs. Emphasis is placed on, but not limited to the following: high speed devices, analog programming, designing complete working system, start-up and troubleshooting techniques and special projects. Upon completion, students must demonstrate their ability by developing energy management and other programs, loading such programs into PLCs and troubleshooting the system if necessary.

ECT 253 Direct Digital Control 2-2-4
(ELT 221 ELECTRONICS FOR ELECTRICIANS I)
This course introduces students to the basic principles of solid state electronic equipment as found in many electrical and motor control circuits. Emphasis is placed on fundamental concepts of diodes, transistors, FETs and MOSFETs as they are used in electrical control circuits. Upon completion, students should understand the basic operation of solid state components and be able to perform basic troubleshooting tasks.

ECT 254 Test and Balance 2-2-4
(CR 205 SYSTEM SIZING AND AIR DISTRIBUTION )
Principles of air conditioning is the study of air properties through psychrometrics. The study of psychrometrics lays the groundwork for students to develop a basic understanding of air properties, and how it acts and reacts under changing conditions. The psychrometric chart and problem solving are included in this course. Air flow and duct design will also be covered as part of this course. Upon completion, the student will be able to interpret psychrometric charts, calculate cooling-heating capacity, and design duct systems.

Engineering (EGR)
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

EGR 100 Engineering Orientation 1-0-1
This course is designed to make beginning engineering students aware of the many facets of engineering, of their relation to society, and of the objectives of the engineering curriculum. It is designed to stimulate interest in engineering and student-instructor dialogue.

EGR 125 Modern Graphics for Engineers 1-4-3
This course provides an introduction to manual and computer-assisted techniques of graphic communication employed by professional engineers. Topics include: lettering; instrumental and computer-aided drafting; technical sketching; orthographic projection; pictorial, sectional, and auxiliary views; and dimensioning.

EGR 220 Engineering Mechanics - Statics 3-0-3
This course includes vector algebra, force and moment systems, equilibrium of force systems, trusses, friction and property of surfaces.

English (ENG)

ENG 080 English Laboratory 1-1/0/1-1
This course, which may be repeated as needed, provides students with a laboratory environment where they can receive help from qualified instructors on English assignments at the developmental level. Emphasis is placed on one-to-one guidance to supplement instruction in English courses. A student's success in this course is measured by success in those other English courses in which the student is enrolled.

ENG 093 Basic English II 3-0-3
This course is a review of composition skills and grammar. Emphasis is placed on coherence and the use of a variety of sentence structures in the composing process and on standard American written English usage. Students will demonstrate these skills chiefly through the writing of paragraph blocks and short essays. Must have a "C" or better to enroll in ENG 101. With a grade of C or above the students may enroll in ENG 101; with a grade below C the student must repeat the course.

ENG 101 English Composition I 3-0-3
PREREQUISITES: (1) A grade of C or better in ENG 093 or appropriate English placement score; (2) Keyboarding skills or OAD 100; and (3) A grade of C or better in RDG 085 or appropriate reading placement score.
English Composition I provides instruction and practice in the writing of at least six (6) extended compositions and the development of analytical and critical reading skills and basic reference and documentation skills in the composition process. English Composition I may include instruction and practice in library usage. Must have a "C" or better to enroll in ENG 101.

ENG 102 English Composition II 3-0-3
PREREQUISITE: A grade of "C" or better in ENG 101 or the equivalent.
English Composition II provides instruction and practice in the writing of six (6) formal, analytical essays, at least one of which is a research project using outside sources and/or references effectively and legally. Additionally, English Composition II provides instruction in the development of analytical and critical reading skills in the composition process. English Composition II may include instruction and practice in library usage.

ENG 130 Technical Report Writing 3-0-3
PREREQUISITE: ENG 101 or the equivalent.
This course provides instruction in the production of technical and/or scientific reports. Emphasis is placed on research, objectivity, organization, composition, documentation, and presentation of the report. Students will demonstrate the ability to produce a written technical or scientific report by following the prescribed process and format.

ENG 251 American Literature I 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.
This course is a survey of American literature from its inception to the middle of the nineteenth century. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that
shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 252  American Literature II** 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.

This course is a survey of American literature from the middle of the nineteenth century to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 261  English Literature I** 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.

This course is a survey of English literature from the Anglo-Saxon period to the Romantic Age. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 262  English Literature II** 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.

This course is a survey of English literature from the Romantic Age to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 271  World Literature I** 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.

This course is a study of selected literary masterpieces from Antiquity to the Age of Reason. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 272  World Literature II** 3-0-3
PREREQUISITE: ENG 102 or equivalent with a grade of "C" or better.

This course is a study of selected literary masterpieces from the Age of Reason to the present. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

**ENG 299  Directed Studies in Language and Literature** 1/3-0-1/3
PREREQUISITE: Permission of the instructor.

This course, which may be repeated for credit so long as the topics differ, provides the student the opportunity to study an English-language or literary topic chosen by the student in consultation with the instructor. Emphasis is placed on the student's investigating the topic and reporting the results of the investigation. The student will demonstrate knowledge of the topic through either a written or an oral presentation.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

**Environmental Technology (EVT)**

Availability of courses in this program is dependent upon sufficient demand. See advisor for further information.

**EVT 101  Introduction to Environmental Science and Technology** 3-2-4

This course is a survey of modern environmental science. Topics include ecosystem processes, species strategies, social systems, community building, ecosystems stability, population ecology, individual adaptations, species diversity, and physical and chemical systems from geochemistry to soil science. Upon completion, students should be able to explain the interdependencies of the ecosystem of our planet.

**EVT 105  Introduction to Occupational Safety and Health** 3-0-3

This course provides an overview of the field of occupational safety and health technology. Topics include an overview of OSHA regulations, origins of occupational safety and health standards, safety and health process design, safety and health technology, and managing safety processes. Upon completion, students should be able to demonstrate occupational safety and health knowledge.

**EVT 107  Environmental Health and Safety Assessments and Reporting** 3-0-3

This course focuses on procedures in conducting environmental audits, legal issues, typical auditing problems, audit protocol, managing and critiquing an audit program, and dealing with small businesses during audit program. Emphasis is on problem areas in the workplace setting where potential violations of federal, state, and local laws could cause severe damage to an industry or company. Upon completion, students should be able to conduct environmental site assessments.

**EVT 110  Introduction to Environmental Laws and Regulations** 3-0-3

This course provides an overview of current federal laws and regulations that relate to the environment. Topics include laws and regulations relating to air, land, and water, such as the Clean Air Act, Clean Water Act, RCRA, Toxic Substance Control Act, the Federal Pesticide Acts, OSHA, CERCLA, and SARA. Information on Alabama specific law regulation by the Alabama Department of Environmental Management (ADEM).
and obtaining permits is also presented. Upon completion, students should be able to explain methods and strategies to ensure regulatory compliance.

**EVT 120 Environmental Sampling and Analysis** 3-2-4
This course is designed to introduce students to the theory and practical methodology of the analysis of significant inorganic substances in different environmental sample matrices. Topics include sample acquisition, preservation, preparation, analysis and documentation according to approved EPA methods and guidelines. Quality assurance and quality control requirements will be stressed. Field and laboratory exercises will be completed to determine the composition for several selected inorganic substances. Upon completion, students should be able to perform environmental sampling and analysis.

**EVT 220 Toxicology** 2-2-3
This course is designed to familiarize students with acute and chronic health effects due to exposures with hazardous materials. Topics covered in this course include review of human physiology and recognition of physiological effects of toxic agents, concepts of TLV and LD, use of medical technology, modes of contact and entry of toxic agents, dose time, and concentration effects, recognition of toxic agents, occupational diseases, and epidemiology. Upon completion, students will understand the effects of exposure to hazardous materials on the human body.

**EVT 229 Ecology** 3-2-4
Elementary concepts with focus on energetics, limiting factors, the process of adaptation to a changing environment, the niche, ecological pyramids and succession. The laboratory will consist of elementary concepts with focus on the niche, ecological pyramids and succession.

**EVT 230 Pollution Prevention** 3-0-3
Case studies are presented for understanding, communicating, and managing industrial manufacturing processes. This course includes examples of changing operating practices, materials substitution, process/product changes and recycling/reuse. Topics include how to develop a process flow diagram and material balances for a generic manufacturing facility, how to identify potential pollution prevention opportunities, and how to determine feasibility of various pollution plants. Upon completion, students should be able to develop and evaluate pollution prevention plans.

**EVT 250 Hazardous Waste Operations and Emergency Response** 3-2-4
This course is an overview of emergency planning techniques for hazardous materials spills. Topics include the coordination and implementation of emergency response procedures, and first aid and CPR. Upon completion, students should be able to design and/or evaluate emergency response plans.

**EVT 260 Introduction to Industrial Hygiene** 2-2-3
This course focuses on laboratory and plant hazards. Topics include sampling techniques, hazard evaluation, control of airborne contaminants, ventilation, filter preparation and sampling, air quality, respiratory disease, and the use of appropriate laboratory and safety equipment. Upon completion, students will have a thorough knowledge of all areas of industrial safety.

**EVT 280 Hazardous Materials Management** 2-2-3
This course focuses on methods of hazardous waste minimization, recovery, destruction, and disposal. Topics include conservation, recycling, and safe disposal techniques for any hazardous material. Upon completion, students should be able to explain MSDS sheets and explain processes to minimize waste creation.
EVT 290 Workplace Analytical Methods 2-2-3
This course introduces sampling strategy and technique, analytical methods and measurements, and evaluation of gathered test data. Topics include wet chemistry, gas chromatography, high performance liquid chromatography, spectrophotometry, and other electroanalytical techniques. Upon completion, students should be able to read and interpret data from these sources and make presentations on cause and effect results from the data.

Fire Science (FSC)
Availability of courses in this program is dependent upon sufficient demand. See advisor for further information.

FSC 101 Introduction to the Fire Service 3-0-3
This course teaches the many functions of the fire service, its importance and origins. It is designed to acquaint the student with the philosophy and history of the fire service and fire protection, the exacting loss of life and property, and the organization and function of public and private fire protection agencies. Emphasis is placed on the organization and function of federal, state, county, city, and private fire protection.

FSC 105 Chemistry for the Fire Service 3-0-3
This is a survey of general chemistry as applied to the fire service. Emphasis is on fundamental facts, principles, theories, and applications. Course will include study of states of matter, energy, common substances, laws that govern the movement of gases, chemical formulas and structure, the study of atoms and molecules, chemical reactions related to firefighting, and hazardous materials.

FSC 110 Building Construction Principles 3-0-3
This course highlights and accesses the problems and hazards to fire personnel when a building is attacked by fire or is under stress from other factors dealing with collapse. Emphasis is placed on construction principles: wood, ordinary, steel, concrete, and truss construction.

FSC 120 National Incident Management System (NIMS) I 3-0-3
This course introduces the student to the incident command system, its organizational structure, history, principles, and features and the National Incident Management System as a template for integration of public and private entities working together on emergency incidents. Tabletop exercises and scenarios will be used to give the student opportunity to apply the practical aspects of the incident command systems and to demonstrate its relationship to the National Incident Management System. The course will also introduce students to the concepts and principles of the National Response Framework and the National Response Plan. Students will be given the opportunity to take online exams for certification for FEMA IS-100, IS-200, IS-700 and IS-800. This course will meet the NIMS baseline training requirements for the above mentioned courses.

FSC 130 Introduction to Fire Suppression 3-0-3
This course is a study of organizational structure, fire suppression, fire suppression equipment, characteristics and behavior of fire, and fire hazard properties of ordinary materials. Emphasis is placed on the most common structural, vehicle, and urban interface fires.

FSC 131 Fire Extinguishment Principles 3-0-3
This is a study of water supplies and services, fire extinguishing chemicals, and the selection and use of extinguishing agents. Emphasis is placed on dry chemical, dry powder, foam and halogenated agents.

FSC 151 Introduction to Fire Prevention/ Education 3-0-3
This course is an introduction to the history and philosophy of fire prevention and the need for fire prevention education. Course includes fire prevention functions, development, and enforcement of fire prevention codes and regulations. It also includes the design and implementation of age appropriate education materials and benefits of community relations, support, and programs.

FSC 160 Hazard Awareness 3-0-3
This course includes the basic awareness of characteristics and behaviors of solids, liquids, and gases when involved in fire. Emphasis is placed on characteristics, storage, and handling of various materials.

FSC 161 Hazardous Materials Awareness and Operations 3-0-3
This course is for emergency response personnel who may be first on the scene of a hazardous materials emergency. First responders at the awareness level are expected to recognize the presence of hazardous materials, protect themselves, secure the area, and call for trained personnel. At the operational level, the first responder uses the knowledge gained from the awareness level to act in a defensive posture to protect people, the environment, or property from the effects of an unplanned hazardous materials release. This course meets the requirements of the mandatory Awareness/ Operational training in hazardous materials required by Title III - Emergency Planning and Community Right-to-Know Act of 1986 and NFPA 472, Standard on Professional Competence of Responders to Hazardous Materials Incidents current edition.

FSC 170 Fire Hydraulics and Water Supply 3-0-3
This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water and fire protection and to apply hydraulic principles to analyze and resolve water supply problems.

FSC 201 Fire Instructor I 3-0-3
A course that trains participants to teach a class from a prepared lesson plan. This course introduces the student to the concept of utilizing training aids to enhance his/her presentation, how to properly select these training aids, and how to use the training aid selected. Subject areas for this course include: Communication, Concepts of Learning, Methods of Training, Organizing the Class, Performance Evaluations, Testing and Evaluations, The Lesson Plan, Teaching Techniques, and the Use of Instructional Materials. The student will give several presentations during the week, all leading the final fifteen minute graded presentation on the final day of class.

FSC 202 Fire Instructor II 3-0-3
This course provides the Fire Instructor I with the next level of understanding for the training of personnel. This course trains the participants to perform job and task analysis, develop goals and objectives, and develop a lesson plan along with the coordinating training aids, and student tests and evaluation. During the course, the students are divided into groups, each
of which is responsible for the development of a lesson plan to be presented to the class on the final day.

**FSC 203 Fire Instructor III** 3-0-3
This course is intended for the instructor who is ready to assume a leadership role by moving into the upper management level of his/her department. This course consists of subjects designed to give the instructor more knowledge of management and supervision so that he/she can make basic evaluations of employee relations and assume a more proactive role in their department. If you bring your own laptop computer the required software is Microsoft Word and PowerPoint.

**FSC 208 Fire Combat Tactics and Strategy** 3-0-3
This course is designed to offer the advanced firefighter or beginning fire officer the necessary information and related techniques to ensure effective fire scene operations. Topics of study include: Pre-fire Planning, Tactical Operations, and Scene Management Techniques. Students are given the opportunity to participate in group activities, discussions, and practical exercises to further enhance the learning experience and reinforce methodology discussed.

**FSC 210 Tactical Considerations for Building Construction** 3-0-3
This course includes a detailed study of know hazards of various construction types and tactical and operational considerations for safe fireground/incident operations. Emphasis is placed on firefighter safety and survival.

**FSC 220 National Incident Management System (NIMS) II** 3-0-3
This course will extend the students understanding of NIMS I and allow them to operate in several complex roles in a Unified Command system. These positions may include Command and General Staff, Incident Command, and deputies and/or assistants to the Incident Commander. This is accomplished by utilizing tabletop exercises and real-time scenarios. This course will meet the baseline requirements for the NIMS 300 and NIMS 400.

**FSC 230 Rescue Technician: Rope** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
This course in rope rescue techniques includes a classroom review of equipment, knots and rope safety. Instruction events include: establishing need for rope rescue; uses and limitations of equipment; knotcraft; safety aspects, anchoring systems; rescue rappelling; third man rescue; lowering systems and other aspects of rope rescue.

**FSC 231 Rescue Technician: Confined Space** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
This course is designed for both fire department personnel and private industry, this course provides responders with a comprehensive understanding of accidents involving a confined space. It teaches the responder how to recognize the hazard, access the victim, stabilize the victim and the proper procedures for retrieval. Practical and classroom sessions focus on the three primary hazards associated with confined space rescue: physical, atmospheric, and physiological. Realistic training evolutions using the latest in equipment and techniques ensure student retention of this material.

**FSC 232 Rescue Technician: Trench** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
A course designed to offer a combination of classroom and practical evolutions that allow the student to learn proper techniques to make open trenches and excavations safe for victim access and removal. The class is made realistic by actual sheeting and shoring operations of “unsafe” trenches, by using shoring equipment, and practice in developing skills in lifting practices within the trench environment.

**FSC 233 Rescue Technician: Structural Collapse** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
This course is designed to comply with NFPA 1006, Standard for Rescue Technician Professional Qualifications. It is an intense course which addresses heavy construction collapse and emphasizes the following discipline areas: breaching and breaking, lifting and moving, interior shoring, exterior shoring, and cutting and burning.

**FSC 234 Rescue Technician: Surface Water** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
This course combines classroom and field instruction that includes, but is not limited to: water hydrology, preplanning water sites, safety, self-rescue, boat operations, in-water/shore-based rescues, rope techniques, highline rescues, and command of water incidents. Emphasis is placed on rope techniques and knots, and experience with both is high recommended, but not required.

**FSC 235 Rescue Technician: Dive** 3-0-3
This course is a certification course being written by the Fire College. The description will be inserted when completed.

**FSC 236 Rescue Technician: Boat Operator** 3-0-3
This course is a certification course being written by the Fire College. The description will be inserted when completed.

**FSC 237 Rescue Technician: Vehicle and Machinery Extrication** 3-0-3
PREREQUISITE: Certified Volunteer Firefighter or Certified Firefighter I or documented proof of Hazardous Materials Awareness & Operational training, Introduction to Technical Rescue, completion of EMT Basic course.
This course is designed to offer a combination of classroom and practical evolutions that allow the student to learn proper techniques to plan for a vehicle/machinery incident, establish fire protection, stabilize a vehicle or machine, isolate potential harmful energy sources, determine vehicle access and egress points, create access and egress openings for rescue, disentangle victims, remove a packaged victim to a designated safe area, and terminate a vehicle/machinery incident.
FSC 239 Breathing Apparatus Specialist Course 3-0-3
Smoke Diver is a physically demanding, advanced firefighter course with a focus on fire suppression and structure fire rescue. Smoke Diver emphasizes rapid intervention techniques along with firefighter survival skills. The course provides realistic fire ground working conditions, requiring the participant to learn the limitations of his/her equipment. The curriculum teaches team building through intensive activities that include attack hose evolutions and multiple search team rescues. Upon completion of the Smoke Diver course, the student will return to their department with an added sense of confidence in his/her abilities and equipment. Tactics learned can be shared with other members to enhance the safety of fellow firefighters. Successful completion of the course allows the participant to receive certification and special Smoke Divers patch.

FSC 241 Fire Investigator I 3-0-3
This course targets fire investigators, police officers, and company-level officers with a desire to learn more about determining the origin and cause of fire. Students wishing to attend this course should be prepared for an intense week of training and practical skills application. Topics covered include: Determining the Point of Origin, Burn Patterns, Evidence Collection and Analysis, Interviewing Techniques, and Court Procedure and Testifying.

FSC 242 Fire Investigator II 3-0-3
This is an introduction to arson and incendiarism, arson laws, methods of determining fire causes, evidence, interviewing and detaining witnesses, procedures in handling juveniles, and court procedures.

FSC 243 Fire Investigator III 3-0-3
This course is a certification course being written by the Fire College. The description will be inserted when completed.

FSC 251 Fire Inspector I 3-0-3
A beginning level course for firefighters and other interested parties wishing to become more involved in the aspect of fire prevention and inspections. This course is primarily designed for those entering into fire service inspections and would be extremely useful to city inspectors and company level officers. Some of the topics covered in this course include: Building Construction, Decorative Materials and Furnishings, Fire Drills, Inspection Procedure, Code Enforcement, and Fire Alarm and Communications.

FSC 252 Fire Inspector II 3-0-3
This course delves deeper into the interpretation of applicable codes and standards, covers the procedure involved in various types of inspections, and prepares the inspector for the plans review process. It is an advanced level course which covers a wide range of topics some of which are: Inspection Procedure, Building Construction, Occupancy Classification and Means of Egress, Fire Protection and Water Supply Systems, Plans Review, and the Storage of Hazardous Materials.

FSC 253 Fire Inspector III 3-0-3
This course provides the participant with an in-depth view of the skills and duties required of the Fire Inspector III. The Fire Inspector III is an individual at the third and most advanced level of progression, who has met the job performance requirements specified in NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plans Examiner, current edition. The Fire Inspector III performs all types of fire inspections, plans review duties, and resolves complex code-related issues.

FSC 254 The ISO (AIA) Standards 3-0-3
This course is a study of insurance theory and practice, the economics of the ISO grading system and a city’s fire defense and insurance rates. Included is a detailed analysis of a city’s water supply, fire department, fire alarm, fire prevention, and other grading methods of fire defense.

FSC 255 Public Fire and Life Safety Educator 3-0-3
With the leading cause of death among children being unintentional injuries, the need for fire and life safety education has become evident in today’s society. This course will train the student to coordinate and deliver existing comprehensive community fire and injury prevention programs designed to eliminate or mitigate situations that endanger lives, health, property, and the environment.

FSC 261 Hazardous Materials Technician 3-0-3
This course is designed for the student already certified at the Hazardous Materials Awareness and Operation level, the course develops the skills already learned and provides in-depth training in the mitigation of hazardous materials incidents. Through both classroom and practical training the student becomes familiar with health and safety issues, incident management, hazard and risk analysis, personal protective clothing, and decontamination.

FSC 262 Hazardous Materials Incident Commander 3-0-3
This course supplies the incident commander with the knowledge and skills to perform their role as the person responsible for all decisions relating to the management of the incident. The candidate will learn about personal protective clothing, decontamination, branch functions with the Incident Management System, and the overall tactics to properly mitigate a hazardous materials incident.

FSC 264 Airport Fire Fighter 3-0-3
Designed for fire departments, both civilian and military, whose primary mission is aircraft fire and rescue. This course meets the training requirements of both NFPA 1003 and FAA FAR Part 139.319. The course covers such topics as: Airport Familiarization, Aircraft Rescue and Firefighting Apparatus, Aircraft Types, Engines and Systems, and Aircraft rescue and Firefighting Procedures. These classroom sessions are followed by practical exercises in turret operations, and extinguishment of wheel/brake, engine, interior cabin, and fuel spill fires through the use of handlines. This course will be held at a facility where various aircraft and apparatus are available.

FSC 266 Wildland Fire Fighter 3-0-3
This course introduces the student to basic wildland firefighting and the strategies and tactics involved during suppression operations including fire line safety, and emphasizing the wildland fire orders and watch out situations. This course covers fire behavior, fire weather, fuel types, safety equipment and guidelines, incident size up, determining resource needs, direct vs. indirect attack, burn-out, and backfiring.
FSC 268 Industrial Fire Protection 3-0-3
This course introduces the student to the problem of fire loss and fire safety in an industrial setting and the methods, techniques and programs commonly applied to industrial fire protection. Topics include loss control processes, emergency action options, safety devices and procedures, basic organization and training for industrial fire personnel and special problems in industrial settings.

FSC 270 Fire Protection Systems 3-0-3
This course will teach students the design and operation of fire protection systems for commercial, residential, and special hazard environments. Students will understand the general principals of automatic sprinkler systems, heat and smoke control systems, standpipe systems, and fire detection/alarm systems, and portable extinguishing systems.

FSC 280 Fire Apparatus and Equipment 3-0-3
This course is designed to familiarize the students with the basics of modern fire apparatus and related equipment. The course will include examination of pumps, ladders, quints, hazardous materials vehicles, and other emergency response vehicles. Students will understand the basic operation and purpose of each vehicle and identify the purpose and use of equipment routinely carried by each vehicle.

FSC 281 Fire Apparatus Operator: Pumper 3-0-3
This course is designed for the firefighter who wishes to advance to the next level of his/her profession. This course consists of six modules: Preventive Maintenance, Test and Inspections, Driving/Operating, Water Supply, Sprinklers and Standpipes, and Operations. Requires valid drivers license, 16 hours of apparatus training that must be completed and documented by the student’s fire department prior to attending class.

FSC 282 Fire Apparatus Operator: Aerial 3-0-3
A course designed to provide the structural firefighter with the needed knowledge and skills to successfully operate aerial apparatus. A must for departments using aerial apparatus, this course covers topics such as: Types and Construction of Aerial Apparatus, Positioning Aerial Apparatus, Stabilizing Systems, and Maintenance and Testing.

FSC 291 Fire Officer I 3-0-3
The Fire Officer I curriculum identifies the requirements necessary to perform the duties of a first line supervisor. This course introduces the student to the basic concepts of management and supervision by concentration on such topics as: Organizational Structure, Communication Skills, Human Resource Management, Public Relations, Planning, Emergency Service Delivery, and Safety.

FSC 292 Fire Officer II 3-0-3
This course is structured for the fire officer who is ready to assume a leadership role by moving into the middle management level of his/her department. This course gives the officer more knowledge of management and supervision so that he/she can make basic evaluations of employee relations and assume a proactive role in their department. This course expands on the knowledge base attained in Fire Officer I by revisiting some of the same subjects and adding additional material. Some new subject areas include information management, government structure, and department budget planning and management.

FSC 293 Fire Officer III 3-0-3
This course is specialized for the chief officer who is ready to advance into the upper management level of his/her department. This course consists of subjects designed to give the officer more knowledge of management and administration so that he/she can make basic evaluations of employee relations and assume a more proactive role in their department. This is a projects-based class.

FSC 294 Fire Officer IV 3-0-3
This course meets executive management level needs. The course is designed to meet the elements of NFPA 1021, Chapter 7. Fire Officer IV will emphasize management of fire protection services to include human resource management, multi-agency emergency service delivery with horizontal/vertical communication requirements and risk management. There will be group interactive exercises, which will reinforce class lectures.

FSC 295 Fire Department Safety Officer 3-0-3
The purpose of this course is to provide training for fire officers and firefighters on the role and responsibilities of the Incident Safety Officer, and to allow participants to practice some of the key skills needed for competency as an Incident Safety Officer. This training program is for Fire Officers who could be asked to assume the duties of the Incident Safety Officer either as a staff assignment or an on-scene appointment. The program is also appropriate for firefighters who will be working on-scene with the Incident Safety Officer and must understand and appreciate the scope and duties of the job.

FSC 297 Selected Topics in Fire Service Operations 3-0-3
This course provides directed reading and discussion of selected topics related to fire service operations. Emphasis is placed on student needs. Upon completion, students should be able to demonstrate skills developed to meet specific needs.

FSC 298 Public Safety Telecommunicator 3-0-3
This is the only course which meets both the professional qualification objectives established by both NFPA 1061 and the Alabama Department of Public Health/Emergency Medical Dispatch. Designed for the entry level dispatcher/telecommunicator, this course will familiarize them with the basic concepts of alarm transmission and emergency dispatch procedure along with learning the skills involved with using the EMDPRS. With the emergency dispatch system, enhanced 9-1-1 centers, and the rapid development of metro dispatch centers, telecommunication training has become critical for all departments regardless of size.

FSC 299 Legal Aspects of the Fire Service 3-0-3
This course introduces students to the legal obligations and responsibilities within the fire service along with the limitations and restrictions placed on emergency responders. Students will discuss and apply federal and state laws, codes, regulations and standards relevant to the fire service. Both civil and criminal law will be addressed.

Geography (GEO)

GEO 100 World Regional Geography 3-0-3
This course surveys various countries and major regions of the world with respect to location and landscape, world
importance, political status, population, type of economy, and
tsits external and internal organization problems and potentials.

+GEO 200 Geogrophy of North America 3-0-3
This course is a survey of the geography of the United States
and Canada with special emphasis on land usage, mineral
resources, industrial development, and social and economic
adaptation of man and the natural environment.

+GEO 201 Human Geography 3-0-3
PREREQUISITE: GEO 100
A conceptual approach to the study of humans, their
distribution, economic systems, behavior patterns, value
systems and environmental perceptions, with emphasis
given to the resulting patterns of cultural landscapes that
characterize the earth.

+GEO 220 Principles of Physical Geography 3-0-3
PREREQUISITE: GEO 100.
This course is an introduction to natural features of the earth.
It concentrates on weather, climate, soil, and vegetation
associations, on landforms and on the forces that have been
active in shaping the earth’s surface.

+Availability of this course is dependent upon sufficient
demand. See master schedule of classes or advisor for further
information.

Health Education (HED)
Availability of courses in this program is dependent upon
student enrollment. Except for HED 226 and HED 231. See
master schedule of classes or advisor for further information.

HED 226 Wellness 3-0-3
This course provides health-related education to those
individual seeking advancement in the area of personal
wellness. The course has 5 major components: (1) fitness and
health assessment, (2) physical work capacity, (3) education,
(4) reassessment and (5) retesting.

HED 231 First Aid 3-0-3
This course provides instruction to the immediate, temporary
care which should be given to the victims of accidents and
sudden illness. It also includes standard and advanced
requirements of the American Red Cross, and/or the American
Heart Association. CPR training also is included.

Health Information Technology (HIT)
HIT 230 Medical Coding Systems I 3-0-3
This course is intended to develop an understanding of coding
and classification systems in order to assign valid medical codes.
Instruction includes coding diagnoses and/or procedures; 序
sequencing codes; analyzing actual medical records to
identify data elements to be coded; validating coded clinical
information. Student competency includes demonstration of
coding principles and applications.

History (HIS)
HIS 101 Western Civilization I 3-0-3
This course surveys the social, economic, and political
developments which shaped the modern western world. This
course covers history from the ancient world through the
Reformation.

HIS 102 Western Civilization II 3-0-3
This course continues HIS 101. It surveys the development of
the western world from the Reformation to the present.

HIS 201 United States History I 3-0-3
This course surveys United States history during colonial,
Revolutionary, early national and antebellum periods. It
concludes with the Civil War and Reconstruction.

HIS 202 United States History II 3-0-3
This course is a continuation of HIS 201; it surveys United
States history from the Reconstruction era to the present.

+HIS 216 History of World Religions 3-0-3
This course presents a comparison of the major religions of
the world from a historical perspective. Emphasis is placed on
the origin, development, and social influence of Christianity,
Judaism, Islam, Hinduism, Buddhism, and others.

+HIS 220 Contemporary Studies 3-0-3
This course provides a survey of contemporary problems and
issues within a historical context. Topics might include
nationalism, the rise of Islam as a powerful influence in the
post-Cold War environment, environmental issues, and the
impact of colonialism on modern, Third World Society.

+HIS 256 African-American History 3-0-3
This course focuses on the experience of African-American
people in the western hemisphere, particularly the United
States. It surveys the period from the African origins of the
slave trade during the period of exploration and colonization
to the present. The course presents a comparison between
the African experience in the United States and in Mexico and
South America.

+HIS 260 Alabama History 3-0-3
This course surveys the development of the state of Alabama
from pre-historic times to the present. The course presents
material on the discovery, exploration, colonization, territorial
period, ante-bellum Alabama, Reconstruction, and modern
history.

+HIS 299 Directed Studies in History 1/3-0-1/3
This course affords students opportunities to study selected
topics of a historical nature under the direction of an instructor
either as part of class or on an individual basis. Internships with
historical and preservation organizations, thesis development,
and the analysis of secondary monographs are examples of
activities for this course. HIS 299 may be repeated for credit.
+Availability of this course is dependent upon sufficient
demand. See master schedule of classes or advisor for further information.

**Humanities (HUM)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**HUM 100 Humanities Forum** 1-0-1
In this course, credit is given for participation in lectures, concerts, and other events which have relevance to the study of the humanities. The course may be repeated for credit.

**HUM 120 International Studies in Culture** 1-3/0/1-3
This course offers a survey of art, music, and culture of foreign countries. This may involve travel abroad and may be repeated for credit.

**HUM 298 Directed Studies**
This course provides an opportunity for the student to study selected topics in the area of the humanities under the supervision of a qualified instructor. The specific topics will be determined by the interests of the students and faculty and the course may be repeated for credit.

**HUM 299 Phi Theta Kappa**
This course provides an opportunity for the student to study selected topics in the area of the humanities under the supervision of a qualified instructor. The specific topics will be determined by the interests of the students and faculty and the course may be repeated for credit.

**Interdisciplinary Studies (IDS)**

**IDS 115 Forum** 1-0-1
In this course, credit is given in recognition of attendance at academic lectures, concerts, and other events. IDS 115 requires attendance at designated events which are chosen from various lectures, cultural events and programs given at the college or in the community. IDS 115 may be repeated for credit.

**IDS 200 College Scholars Bowl Workshop** 1-0-1
PREREQUISITE: Permission of the instructor.
This course offers the student preparation, practice, and participation in the College Scholars Bowl Program and competition. IDS 200 may be repeated for credit.

**IDS 299 Directed Studies in Leadership** 1/2-0/1/2
PREREQUISITE: Permission of the instructor.
This course provides training and experience in leadership techniques and practice. Students are required to serve in leadership positions on campus or in the community. IDS 299 may be repeated for credit.

**Electronics Technology (ILT)**

Availability of courses in this program is dependent upon student enrollment. See advisor for further information.

**ILT 100 Applied Electronic Computation** 3-0-3
This course is an applied mathematics and algebra course for students in electronics or similar programs. Topics include decimals, fractions, negative numbers, powers and roots, the metric systems, logarithms, applied trigonometry and algebra. Upon completion of this course a student will be able to perform applied mathematics calculations needed in Electronics.

**ILT 101 Survey of Electronics** 3-0-3
This course, in a non-technical way, describes the history and implications of electronics in the modern world. Topics include fundamental concepts of electronics theory, devices, digital and analog circuits, microprocessors, and modern test equipment. Upon completion, students should be able to describe basic laws and circuit behavior for analog and digital circuits.

**ILT 106 Concepts of Direct Current** 3-6-5
This course provides a study of basic concepts and application of direct current (DC). Specific topics include but are not limited to, an introduction to electrical theory, units of electrical measurement, DC electrical components, and constructing various types of DC circuits. Students gain hands-on experience through various laboratory problems. Emphasis is placed on the use of scientific calculators and the operation of common test equipment used to analyze and troubleshoot DC circuits and to prove the theories taught during classroom instruction.

**ILT 107 Concepts of Alternating Current** 3-6-5
This course provides a study of basic concepts and application of alternating current (AC). Specific topics include, but are not limited to, an introduction to AC electrical theory, AC electrical measurements, and constructing and measuring various types of AC circuits. Students gain hands-on experience through various laboratory problems. Emphasis is placed on the use of scientific calculators and the operation of various test equipment used to analyze and troubleshoot AC circuits.

**ILT 112 Concepts of Digital Electronics** 3-6-5
This course provides instruction in digital electronics. Topics include number systems and codes, a review of Boolean algebra, logic elements, digital circuits, programmable logic circuits, and memory and computing circuits. This course provides laboratory exercises to analyze, construct, test and troubleshoot digital circuits.

**ILT 113 Concepts of Electronic Circuits** 3-6-5
This course covers the commonly utilized circuits found in all areas of electronics. These include various rectifiers, filters, voltage regulating circuits, operational amplifier circuits, ICs, and oscillator circuits. Upon completion students will be able to construct and test various types of electronic circuits.

**ILT 125 Digital Communications** 3-0-3
PREREQUISITE: ILT 112.
This course provides the electronics technician with sufficient background in data and digital communications to enter this rapidly expanding field. It includes telephone systems, error detection and correction, data link protocols, modems, multiple-channel systems, network architecture, fiber-optic communications, and data communications applications. Upon completion of this course, students should be able to describe the operation of various digital communications circuits and calculate all parameters.

**ILT 126 Digital Communications Lab** 0-6-2
COREQUISITE: ILT 125
This course provides experimentation to verify theories of
digital communication. Upon completion of this course and Digital Communications, students should be able to construct various digital communications circuits and make necessary measurements and adjustments.

ILT 129 Personal Computer (PC) Hardware 2-3-3
This course covers PC Hardware terminology, component purpose, configuration, pricing and selecting components and systems, for assembling, repairing, and upgrading personal computers. Upon completion of this course, students should be able to describe the basic systems of a PC and be able to perform disassembly and assembly of same.

ILT 130 PC Software Installation and Maintenance 2-3-3
This course will cover installation and maintenance for operating systems and application software on personal computers. Upon completion of this course, students should be able to install and maintain common software packages found on personal computers.

ILT 131 Personal Computer (PC) Problem Determination 2-3-3
PREREQUISITE: ILT 129 and ILT 130. This course will cover various hardware and software tools for diagnosing failures of personal computers. Upon completion of this course, students should be able to diagnose and prescribe the repair steps for a faulty personal computer.

ILT 132 Programming Survey for Technicians 3-0-3
This course introduces the student to common programming languages which they may encounter as technicians. Upon completion of this course, students should be able to write simple programs in common programming languages encountered by technicians.

ILT 133 Electronic Drafting 0-3-1
This course includes basic drawing techniques, interpreting schematic diagrams and recognizing electronic symbols. Upon completion of this course, students should be able to recognize electronic symbols and draw schematic, layout, and pictorial drawings.

ILT 135 Local Area Networks (LANS) 2-3-3
This course provides the student with knowledge of planning, installation, maintenance, and administration of local area networks. Upon completion of this course, students should be able to install and set up a basic local area network.

ILT 164 Circuit Fabrication I 0-3-1
This course provides instruction in fabrication of functional circuits and is an introduction to device construction and fabrication. Utilizing discrete components, students will fabricate functional circuits. Topics include soldering, cable construction, coaxial cable connection and termination, component mounting, cases, and chassis, printed circuit board design, layout, fabrication, and repair, as well as soldering techniques, care of tools, wire splicing, wire wrapping, connector maintenance, and related shop safety. Upon completion of this course, students should be able to perform basic circuit and project construction.

ILT 169 Hydraulics/Pneumatics 2-2-3
This course provides an introduction to hydraulics and pneumatics. Topics include hydraulic pumps, pneumatic compressors, and system components such as valves, filters, regulators, actuators, accumulators, and lubricators. Upon completion, students should be able to apply principles of hydraulics and pneumatics.

ILT 175 Computer Fundamentals for Technology Students 3-0-3
This course introduces the student to applications of computers in the laboratory setting. It will cover the computer from a hardware standpoint and introduce the operating system. Application software will include word processing, spreadsheets, database managers, and other electronic related software. Upon completion, students should be able to operate a personal computer in the technical setting.

ILT 180 Special Topics 0/3-0-9/3
PREREQUISITE: Permission of the instructor. This course is designed to allow students an opportunity to study directly-related topics of particular interest which require the applications of technical knowledge and technical skills. Emphasis is placed on the application of skills and knowledge with practical experiences. Upon completion, students should be able to solve job related problems using technical skills and knowledge.

ILT 194 Introduction to Programmable Logic Controllers 2-1-3
This course provides an introduction to programmable logic controllers. Emphasis is placed on, but not limited to, the following: PLC hardware and software, numbering systems, installation, and programming. Upon completion, students must demonstrate their ability by developing, loading, debugging, and optimizing PLC programs.

ILT 196 Advanced Programmable Logic Controllers 2-1-3
This course includes the advanced principals of PLC’s including hardware, programming, and troubleshooting. Emphasis is placed on developing advanced working programs, and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system.

ILT 201 Industrial Electronics 3-0-3
PREREQUISITE: ILT 205. This course covers applications of electronics in industry with a major emphasis on microprocessors as applied to data acquisition and machine control. Topics include A/D and D/A conversion, signal conditioning, sensors and transducers, control devices, stepper motors, and microprocessor interfacing. Upon completion of this course, students should be able to describe the operation of various sensors, signal conditioning, A/D and D/A conversion, and control devices, as well as perform necessary calculations.

ILT 202 Industrial Electronics Lab 0-6-2
COREQUISITE: ILT 201. This course demonstrates the concepts, devices, and applications of electronics in industrial processes. Upon completion of this course, students should be able to construct, evaluate, and calibrate basic industrial sensing and control circuits.

ILT 203 Biomedical Electronics I 3-0-3
PREREQUISITE: Permission of the instructor. This course includes the technical information necessary in learning to repair biomedical equipment. Topics include the human body, electrodes and transducers, bioelectric
amplifiers, physiological pressure measurements, and electrical and patient safety. Upon completion of this course, students should be able to describe the operation of various circuits and systems commonly found in biomedical equipment.

ILT 204 Biomedical Electronics II 3-0-3
PREREQUISITE: I LT 203.
This course combines theory gained from Biomedical Electronics I for a deeper understanding of biomedical equipment troubleshooting. Topics include respiratory therapy instrumentation, intensive and coronary care unit instrumentation, operating room instrumentation, medical laboratory instrumentation, and electrical safety. Upon completion of this course, students should be able to describe the operation of various circuits and systems commonly found in biomedical equipment.

ILT 205 Microprocessors 3-0-3
PREREQUISITE: I LT 112.
This course introduces microprocessors and explores their applications. This course emphasizes programming and interfacing the microprocessor chip. Upon completion of this course, students should be able to perform binary arithmetic, perform computer arithmetic, describe the basic operation procedures for a microprocessor system, and write programs for a basic microprocessor.

ILT 206 Microprocessors Lab 0-6-2
COREQUISITE: I LT 205.
This course provides familiarization of microprocessor instruction sets. Experiments in programming and interfacing provide an understanding of microprocessor theory. Upon completion of this course, students should be able to program and interface a basic microprocessor system.

ILT 216 Industrial Robotics 3-0-3
This is an introductory course for robotics including the history of robotics, social implications, and reasons for implementing. Robot classification, associated terminology, power systems, control systems, and end-of-arm tooling will be covered. Upon completion, students should be able to explain the basic systems and operation of a simple robot.

ILT 218 Industrial Robotics Concepts 2-2-3
This course provides instruction in concepts and theories for the operation of robotic servo motors and power systems used with industrial robotic equipment. Emphasis is on the application of the computer to control power systems to perform work. Student competencies include understanding of the functions of hydraulic, pneumatic, and electrical power system components, ability to read and interpret circuitry for proper troubleshooting and ability to perform preventative maintenance.

ILT 226 BMET Certification Preparation 3-0-3
This course includes the information necessary for the successful completion of the technician certification examination given by the International Certification Commission for Biomedical Equipment Technology. Upon completion of this course, students should understand the preparation necessary to successful completion of the exam process.

ILT 228 FCC General Radiotelephone License Prep 3-0-3
This course includes the information necessary for the successful completion of the Federal Communication Commission’s General Radiotelephone License Examination. A comprehensive coverage of rules, regulations, and electronic theory is accomplished. Upon completion of this course, students should understand the preparation necessary to successful completion of the exam process.

ILT 232 PC Repair Clinical 0-10-3
PREREQUISITE: Permission of instructor.
This course allows the student to work in the technical capacity as a PC technician at the college or other local sites as approved by the college. Upon completion, the student should be able to perform specific job related skills associated with PC repair.

ILT 234 Microprocessor Systems Troubleshooting 2-2-3
PREREQUISITE: I LT 205.
This course provides familiarization with various techniques and test equipment required to troubleshoot microprocessor based designs to the component and module level. It provides hands on experience troubleshooting microcomputer trainers designed for fault insertion. Upon completion, students should be able to troubleshoot a faulty microprocessor based system.

ILT 239 Certification Preparation 3-0-3
This course includes the review necessary before attempting technician certification examinations given by various non-government certifying organizations and pre-employment tests given by employers. Upon completion of this course students should understand the preparations necessary to successfully complete the exam process.

ILT 267 RF Communications 3-0-3
PREREQUISITE: I LT 113.
This course introduces the concepts of communications systems. Topics include communications fundamentals, AM transmitters and receivers, FM transmitters and receivers, AM and FM transceivers, pulse modulation, antenna design, and advanced communication systems. Upon completion, students should be able to describe the operation of various RF circuits and calculate all parameters.

ILT 268 RF Communications Lab 0-6-2
COREQUISITE: I LT 267.
This course verifies basic radio frequency theories through experimentation. Upon completion of this course and RF communications, students should be able to construct various RF circuits and make necessary measurements and adjustments.

ILT 271 Independent Study 0/1-0/3-1
PREREQUISITE: Permission of the instructor.
This course is designed to allow students to independently study various topics related to instrumentation technology. Emphasis is placed on the refinement or advancement of a particular skill or skills. Upon completion, students should be able to perform specific job related functions according to standard operating procedures.
ILT 272 Independent Study 0/2-0/6-2
PREREQUISITE: Permission of the instructor.
This course is designed to allow students to independently study various topics related to instrumentation technology. Emphasis is placed on the refinement or advancement of a particular skill or skills. Upon completion, students should be able to perform specific job related functions according to standard operating procedures.

ILT 273 Independent Study 3-0-3
PREREQUISITE: Permission of the instructor.
This course is designed to allow students to independently study various topics related to instrumentation technology. Emphasis is placed on the refinement or advancement of a particular skill or skills. Upon completion, students should be able to perform specific job related functions according to standard operating procedures.

ILT 274 Independent Study 0-9-3
PREREQUISITE: Permission of the instructor.
This course is designed to allow students to independently study various topics related to instrumentation technology. Emphasis is placed on the refinement or advancement of a particular skill or skills. Upon completion, students should be able to perform specific job related functions according to standard operating procedures.

ILT 280 Special Topics 3-0-3
PREREQUISITE: Permission of the instructor.
This course is designed to allow students an opportunity to study directly-related topics of particular interest which require the application of technical knowledge and technical skills. Emphasis is placed on the application of skills and knowledge with practical experiences. Upon completion, students should be able to solve job-related problems using technical skills and knowledge.

ILT 280A Special Topics - A+ Certification Preparation 3-0-3
PREREQUISITE: ILT 129, ILT 130, ILT 131, and ILT 135, or by permission of the instructor.
This course includes the information necessary for the successful completion of Technician A+ certification examinations. A comprehensive coverage of core hardware and operating systems is accomplished. Upon completion, students should understand the preparation necessary to successfully complete the core hardware and operation systems technologies exams.

ILT 280B Special Topics - Network+ Certification Preparation 3-0-3
PREREQUISITE: ILT 129, ILT 130, ILT 131, and ILT 135, or by permission of the instructor.
This course includes the information necessary for the successful completion of the vendor-neutral Computer Technology Industry Association’s (CompTIA) Network+ certification examination. A comprehensive coverage of all exam objectives is accomplished. Upon completion, students should understand the preparation necessary to successfully complete the exam process.

ILT 280E Special Topics - EEI Test Preparation 3-0-3
This course includes the review necessary before attempting the Edison Electric Institute’s test battery used by employers to predict performance in training and on the job. Areas of review will include reading comprehension, mechanical concepts, spatial ability, mathematical usage, tables and graphs, and completing the background and opinion questionnaire. Upon completion, students should be able to understand the preparations necessary to successfully complete the test battery.

ILT 280P Power Generation 3-0-3
This course introduces the concepts of electrical power generation and distribution. Methods of electrical power generation discussed include: fossil, hydro, wind, nuclear and solar. Additional topics include: the power grid, historical factors, and current environmental concerns related to power generation.

ILT 291 Cooperative Education 0-15-3
PREREQUISITE: Permission of the instructor.
This course provides students work experience with a college-approved employer in an area directly related to the student’s program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

ILT 292 Cooperative Education 0-15-3
PREREQUISITE: Permission of the instructor.
This course provides students work experience with a college-approved employer in an area directly related to the student’s program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

ILT 293 Cooperative Education 0-15-3
PREREQUISITE: Permission of the instructor.
This course provides students work experience with a college-approved employer in an area directly related to the student’s program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

ILT 294 Biomedical Electronics Clinical I 0-10-3
PREREQUISITE: ILT 203.
Students will be assigned to a local hospital facility, working in the technical capacity as a biomedical electronic technician trainee. Upon completion, students have gained experience as a biomedical equipment technician.

ILT 295 Biomedical Electronics Clinical II 0-10-3
PREREQUISITE: ILT 204.
Continuation of the clinical on-site study I where students are assigned to a local hospital facility working in the technical capacity as a Biomedical Electronic Technician Trainee. Upon completion, students have gained experience as a biomedical equipment technician.
Industrial Maintenance Technology
(INT)

INT 102 Industrial Maintenance Cutting/Welding 1-3-2
This course provides instruction in the fundamentals of acetylene cutting and the basic SMAW (stick) welding. Topics covered are acetylene torch cutting equipment, safety and use; welding safety, welding hand tools, type of welding machines and welding rods, determining types of metal, welding passes, beads, and joints.

INT 105 Introduction to Process Technology 2-3-3
This course is designed to provide the student with an introduction to process control technology and various instruments used to control processes. Upon completion, students should be able to comprehend principles of process control technology and the application of various instruments used to control processes in an industrial setting.

INT 106 Elements of Industrial Mechanics 2-3-3
This course provides instruction in basic physics concepts applicable to industrial mechanics. Topics include mechanical principles with emphasis placed on power transmission and specific mechanical components. Upon course completion, students will be able to apply principles relative to mechanical tools, fasteners, basic mechanics, lubrication, bearings, packing and seals.

INT 107 Fundamentals of Electricity I 3-0-3
This theory based course provides students with knowledge of basic electrical theory and the use of basic instruments to measure electricity. It is a foundational course to enable multicraft industrial maintenance personnel to develop basic knowledge of electricity in a workplace.

INT 108 Fundamentals of Electricity II 2-3-3
This course provides students with knowledge and skills of how to read and interpret electric circuits, how to wire electrical connections, and how to identify faults in electrical motors and controls. It is a foundational course to enable multicraft industrial maintenance personnel to apply knowledge and skill of electricity in a workplace.

INT 109 Components of Material Handling 2-3-3
This course focuses on the different modes of handling manufactured goods or products. Topics include the installation, operation, and maintenance of the material handling process components. Emphasis is placed on determining control limits, performing scheduled maintenance, and troubleshooting performance or function failures. Upon completion, students should be able to install, operate, monitor, maintain and troubleshoot a simulated material handling system.

INT 110 Automated Material Handling 2-3-3
This course focuses on the automatic function and control of different modes of handling manufactured goods or products. Topics include the development of a simulated condition of control parameters within the material handling process, determining control limits, and performing root cause analysis. Upon completion, students should be able to write start-up and shut-down procedures, operate, monitor, and control plant material handling systems at the system wide level.

INT 112 Industrial Maintenance Safety Procedures 3-0-3
This course is an in-depth study of the health and safety practices required for maintenance of industrial production equipment. Topics include traffic, ladder, electrical, and fire safety, safe work in confined spaces, electrical and mechanical lock-out procedures, emergency procedures, OSHA regulations, MSDS Right-to-Know law, hazardous materials safety, and safety equipment use and care. Upon course completion, students will be able to implement health and safety practices in an industrial production setting.

INT 113 Industrial Motor Control I 1-4-3
This course focuses on information regarding industrial motor controls and basic information regarding process logic controllers. Upon completion students will be able to remove, replace, and wire different types of control devices for operating industrial motors.

INT 115 Level and Pressure Devices 3-0-3
This course focuses on craft-related mathematics and process control theory. Topics include elements, transistors, transducers, displacers, controllers, recorders, control valves, actuating and electrical devices. Upon completion, students should be able to understand process control theory and apply the related calculations.

INT 116 Flow and Temperature Devices 1-4-3
This course provides the student with practical experience in process control theory. Emphasis is placed on connecting and calibrating transistors, transducers, displacers, controllers, recorders, control valves, actuating and electrical devices. Upon completion, students should be able to install industrial measurement devices.

INT 117 Principles of Industrial Mechanics 2-2-3
This course provides instruction in basic physics concepts applicable to mechanics of industrial production equipment. Topics include the basic application of mechanical principles with emphasis on power transmission, specific mechanical components, alignment, and tension. Upon completion, students will be able to perform basic troubleshooting, repair and maintenance functions on industrial production equipment.

INT 118 Fundamentals of Industrial Hydraulics and Pneumatics 2-2-3
This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems.

INT 120 Concepts of Direct Current 3-6-5
This course provides a study of basic concepts and application of direct current (DC). Specific topics include but are not limited to an introduction to electrical theory, units of electrical measurement, DC electrical components, and constructing various types of DC circuits. Students gain hands-on experience.
through various laboratory problems. Emphasis is placed on
the use of scientific calculators and the operation of common
test equipment used to analyze and troubleshoot DC circuits
and to prove the theories taught during classroom instruction.

**INT 121 Industrial Hydraulics Troubleshooting** 1-4-3
This course provides instruction in maintenance and
troubleshooting procedures needed for safe and proper repair
of hydraulic systems used with industrial production equipment.
Topics include maintenance and troubleshooting procedures,
hydraulic system maintenance and troubleshooting techniques,
effects of heat, leakage, and contamination on components
and system operation, component maintenance and
troubleshooting, reading and interpreting system diagrams,
and design and troubleshooting of hydraulic circuits and
systems. Upon course completion, students will demonstrate
the ability to troubleshoot and repair industrial hydraulic
systems.

**INT 122 Concepts of Alternating Current** 3-6-5
This course provides a study of basic concepts and application
of alternating current (AC). Specific topics include but are not
limited to: an introduction to AC electrical theory, AC electrical
measurements, and constructing and measuring various
types of AC circuits. Students gain hands-on experience
through various laboratory problems. Emphasis is placed on
the use of scientific calculators and the operation of various
test equipment used to analyze and troubleshoot AC circuits.

**INT 123 Concepts of Solid State Electronics** 3-6-5
This course is an introduction to semiconductor fundamentals
and applications to electronic devices. It covers the basic
operations and applications of rectifier circuits, transistors,
and thyristors. Coverage is given to safety, use, and care with
hazardous materials and personnel as well as material
and environmental considerations. Upon completion students will
be able to construct and test for proper operation of various
types of solid state devices.

**INT 126 Preventive Maintenance** 1-4-3
This course focuses on the concepts and applications of
preventive maintenance. Topics include the introduction
of alignment equipment, job safety, tool safety, preventive
maintenance concepts, procedures, tasks, and predictive
maintenance concepts. Upon course completion, students will
demonstrate the ability to apply proper preventive maintenance
and explain predictive maintenance concepts.

**INT 127 Principles of Industrial Pumps**
and Piping Systems 2-3-3
This course provides information in the fundamental concepts
of industrial pumps and piping systems. Topics include pump
identification, operation, and installation; maintenance and
troubleshooting; and piping systems and their installation.
Upon course completion, students will be able to install,
maintain, and troubleshoot industrial pumps and piping
systems.

**INT 128 Principles of Industrial**
Environmental Controls 2-3-3
This course focuses on the basic knowledge and skills to
service perform routine troubleshooting, maintenance, and
adjustments of HVACR systems in an industrial environment.
After completion, students will be able to perform routine,
low-level maintenance on institutional environmental systems.
Additionally, students receive instruction to complete the EPA
608 certification examination.

**INT 130 Concepts of Digital Electronics** 3-6-5
This course provides instruction in digital electronics. Topics
include number systems and codes, a review of Boolean
algebra, logic elements, digital circuits, programmable logic
circuits, and memory and computing circuits. This course
provides laboratory exercises to analyze, construct, test and
troubleshoot digital circuits.

**INT 132 Preventive and Predictive Maintenance** 2-3-3
This course focuses on the concepts and applications of
preventive and predictive maintenance. Topics include the
introduction to optic alignment equipment, vibration testing
and analysis, data collection, job safety, tool safety, systems
analysis, preventive maintenance procedures and tasks, and
predictive maintenance concepts. Upon completion, students will
demonstrate the ability to apply the planning process for
proper preventive and predictive maintenance.

**INT 134 Principles of Industrial Maintenance**
Welding and Metal Cutting Techniques 2-3-3
This course provides instruction in the fundamentals of
acetylene cutting and the basics of welding needed for the
maintenance and repair of industrial production equipment.
Topics include oxy-fuel safety, choice of cutting equipment,
proper cutting angles, equipment setup, cutting plate and pipe,
hand tools, types of metal welding machines, rod and welding
joints, and common welding passes and beads. Upon course
completion, students will demonstrate the ability to perform
metal welding and cutting techniques necessary for repairing
and maintaining industrial equipment.

**INT 139 Introduction to Robotic Programming** 1-4-3
This course provides an introduction to robotic programming.
Emphasis is placed on but not limited to the following:
Safety, motion programming, creating and editing programs,
I/O instructions, macros, program and file storage. Upon
completion the student will be able to safely perform basic
functions in the work cell as well as program a robot to perform
simple functions.

**INT 153 Precision Machining Fundamentals** I 2-3-3
This course focuses on metal cutting machines used to make
parts and tools. Topics include lathes, mills, drills, and presses.
Upon completion, students will have the ability to use precision
measurement instruments and to read mechanical drawings.

**INT 158 Industrial Wiring I** 1-4-3
This course focuses on principles and applications of
commercial and industrial wiring. Topics include electrical
safety practices, an overview of National Electric Code
requirements as applied to commercial and industrial wiring,
conduit bending, circuit design, pulling cables, transformers,
switch gear, and generation principles.

**INT 161 Blueprint Reading for Industrial**
Technicians 3-0-3
This course is designed to provide the student a comprehensive
understanding of blueprint reading. Topics include identifying
types of lines and symbols used in mechanical drawings;
recognition and interpretation of various types of views,
tolerance, and dimensions.
INT 184 Introduction to Programmable Logic Controllers 2-2-3
This course provides an introduction to programmable logic controllers. Emphasis is placed on both input/output, the following: PLC hardware and software, numbering systems, installation, and programming. Upon completion, students must demonstrate their ability to develop, design, and maintain PLC programs.

INT 206 Industrial Motors I 1-4-3
This course focuses on basic information regarding industrial electrical motors. Upon completion, students will be able to troubleshoot, remove, replace, and perform routine maintenance on various types of motors.

INT 207 Industrial Automatic Controls 3-0-3
This course focuses on the function of automatic controllers in different modes: on-off, proportional, reset, derivative, ratio, and cascade. Topics include operation of pneumatic, electronic, and computer process control equipment; service of basic process equipment and instrumentation; correct operation and maintenance of valves and pumps; recognizing patterns from data; developing and interpreting control charts; determining control limits; and performing root cause analysis. Upon completion, students should be able to write start-up and shut-down procedures, and operate, monitor, and control continuous and batch model plants.

INT 211 Industrial Motors II 1-4-3
This course focuses on advanced information regarding industrial electrical motors. Upon completion, students will be able to troubleshoot, remove, replace, and perform advanced maintenance on various types of motors.

INT 213 Industrial Motor Control II 1-4-3
This course is a continuation of INT 113 focusing on additional theory and practice regarding industrial motor control schematics and wiring. Included are multispeed and softstart wiring techniques for industrial motors and synchronous motor control. The student will also be exposed to the theory, setup and programming of variable speed drives. Upon completion, students will be able to remove, replace, and wire different types of resistors, reactors and transformers similar to those used in the control of industrial polyphase motors and large DC motors.

INT 215 Troubleshooting Techniques 1-4-3
This course is designed to allow students an opportunity to study directly-related topics of particular interest which require the application of technical knowledge and technical skills. Emphasis is placed on the application of skills and knowledge with practical experiences. Upon completion, students should be able to solve job-related problems using technical skills and knowledge.

INT 222 Special Topics 2-3-3
This course provides specialized instruction in various areas related to industrial maintenance. Emphasis is placed on meeting students’ needs.

INT 232 Manufacturing Plant Utilities 2-3-3
This course focuses on the theory of operating and maintaining plant utilities. Topics include the operation/control and maintenance of boilers, HVAC systems, and air compressors. Upon completion, students will demonstrate the ability to repair and maintain utilities systems in an industrial setting.

INT 252 Variable Speed Motor Drives 2-3-3
This course provides instruction in the fundamentals of variable speed drives, industrial motors, and other applications of variable speed drives. Topics include fundamentals of variable speed control, AC frequency drives, DC variable speed drives, installation procedures, and ranges. Upon completion, students will understand the principles of operation of variable speed systems, function of components of each system, set-up and installation and troubleshooting techniques for variable speed drives.

INT 253 Industrial Robotics 2-3-3
This course provides an introduction to programmable logic controllers. Emphasis is placed on the application of the computer to control power systems to perform work. Student competencies include understanding of the functions of hydraulic, pneumatic, and electrical power system components, ability to read and interpret circuitry for proper troubleshooting, and ability to perform preventative maintenance.

INT 254 Robot Maintenance and Troubleshooting 2-3-3
This course introduces the principle concepts in troubleshooting and maintenance of robots. Topics include recognizing and describing major robot components. Students will learn to diagnose robot mechanical problems to the component level; to replace mechanical components and perform adjustments; to troubleshoot class 1, 2, and 3 faults; to manipulate I/O for the robot; and periodic and preventive maintenance. Students will learn how to safely power up robots for complete shutdown and how to manipulate robots using the teach pendant. Upon completion, students will be able to describe the various robot classifications and characteristics, explain system operations of simple robots, and maintain robotic systems.

INT 280 Special Topics in Industrial Maintenance Technology 3-0-3
This course provides specialized instruction in various areas related to industrial maintenance. Emphasis is placed on meeting students’ needs.

INT 284 Advanced Programmable Logic Controllers 2-2-3
This course includes the advanced principles of PLC's, including hardware, programming, and troubleshooting. Emphasis is placed on developing advanced working programs and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system.

INT 288 Applied Principles of Programmable Controllers 2-3-3
This course provides a comprehensive study in the theory and application of specific models of programmable logic controllers. Topics include hardware configuration, memory and addressing detail function of software, instruction types, system troubleshooting, and simple programming techniques.

INT 291 Cooperative Education 0-9-3
This course provides students work experience with a college-approved employer in an area directly related to the student’s program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students
should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competences.

**Machine Shop Technology (MSP)**

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

**MSP 101 Basic Machining Technology** 1-12-5
This course introduces 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 basic operations of measuring, layout, drilling, sawing, turning, and milling.

**MSP 102 Intermediate Machining Technology** 1-12-5
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.

**MSP 103 Advanced Machining Technology** 1-12-5
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.

**MSP 104 Basic Machining Calculations** 1-3-2
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.

**MSP 105 Lathes** 1-6-3
This course covers the operation and safety practices for engine lathes. Topics include turning, grinding, boring, chamfering, necking, grooving, and threading. Upon completion, students should be able to safely operate an engine lathe using appropriate attachments.

**MSP 107 Milling Machines** 1-6-3
This course provides instruction and practice in the use of milling machines. Emphasis is placed on the construction, operation and maintenance of milling machines. Upon completion, students should be able to design, cut, and manufacture tools and fixtures.

**MSP 111 Introduction to Computer Numerical Control** 1-3-2
This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

**MSP 112 Basic Computer Numerical Control Turning** 1-6-3
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

**MSP 113 Basic Computer Numerical Control Milling** 1-6-3
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.

**MSP 115 Advanced Milling Machines** 2-9-5
This course provides additional information on milling setups including rotary tables, boring, dovetail machining, dividing head work. Students obtain hands-on experience in the setup and use of these and other milling accessories.

**MSP 121 Basic Blueprint Reading for Machinists** 1-3-2
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.

**MSP 127 CAM** 2-12-6
This course provides basic introduction to computer assisted programming. This includes geometry construction, tool paths, and post processing.

**MSP 131 Introduction to Metrology** 1-3-2
This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

**MSP 132 Grinding Machines** 1-6-3
This course provides instruction and practice in the use of grinding machines. Emphasis is placed on construction, operation, and maintenance of grinding machines. Upon completion, students should be able to perform essential procedures on grinding machines.

**MSP 135 Millwright Work** 2-6-4
This course provides information on welding, machine installation, couplings, precision measurement, and belts with an overview of the safety requirements for most industrial situations.

**MSP 136 Machine Repair** 1-6-3
This course provides information for students that plan to enter the field of machine tool maintenance. Concentrating on power transmission through various mechanical means and the disassembly and repair of these machines provides the students with the experience needed to repair many types of machines.

**MSP 137 Advanced CAM** 2-6-4
This course provides expanded views of CNC mill and lathe operations with in-depth instruction in the use of Computer Aided Machining (CAM) software to provide multiple axis
part programs for the CNC mill using Master CAM Software.

MSP 142 Advanced Machining Calculations 1-3-2
This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon completion, students should be able to calculate solutions to machining problems.

MSP 173 Injection Mold Setter Skills 1-4-3
This course is designed to teach students basic mold setter skills. They will learn the fundamentals of injection molding operations, including molding terminology, machine part identification, operating safety, machine controls and machine startup and shutdown. Students are taught to identify common part defects such as non-fill, burn marks, warpage, discoloration, weld lines, and flash. At the end of this course students should be able to safely work as a mold setter.

MSP 175 Injection Mold Setter Skills Lab 0-9-3
This course is designed to teach students basic mold setter skills in a laboratory environment. It is a companion course for AUT/MTT/MSP 173. The students will learn the practical application of injection molding operations, including molding terminology, machine part identification, operating safety, machine controls and machine startup and shutdown. Students are taught to identify and correct common part defects such as non-fill, burn marks, warpage, discoloration, weld lines, and flash. At the end of this course students should be able to safely work as a mold setter.

MSP 181 Special Topics in Machine Shop Technology 1-3-2
PREREQUISITE: Permission of the instructor.
This course is a guided independent study of special projects in Machine Shop Technology. Emphasis is placed on student needs. Upon completion, students should be able to demonstrate skills developed to meet specific needs.

MSP 182 Special Topics in Machine Shop Technology 0-6-2
PREREQUISITE: Permission of the instructor.
This course is a guided independent study of special projects in Machine Shop Technology. Emphasis is placed on student needs. Upon completion, students should be able to demonstrate skills developed to meet specific needs.

MSP 221 Advance Blueprinting 1-3-2
This course provides basic blueprint reading theory and practice for machining and welding trades. Three-dimensional comprehension and dimensioning practices are the primary concern of this course.

MSP 273 Injection Mold Processing 1-4-3
This course is designed to teach student basic injection mold processor skills. Topics will include safety, molding materials, machine controls, fill rates, temperature control, pressure control, and timing. Students will learn how various factors affect the injection mold process and how to compensate for those factors by setting and adjusting machine controls.

MSP 291, 292 Co-op in Machine Shop Technology 1/3-5/15-1/3
PREREQUISITE: Permission of instructor.
Students work on a part-time basis in a job directly related to Machine Shop Technology. The employer and supervising instructor evaluate the student’s progress. Upon completion, students will be able to apply skills and knowledge in an employment setting.

Mathematics (MAH) (MTH)

MTH 090 Basic Mathematics 3-0-3
This is a developmental course reviewing arithmetical principles and computations designed to help the student’s mathematical proficiency for selected curriculum entrance.

MTH 098 Elementary Algebra 3-0-3
PREREQUISITE: A grade of “C” or higher in MTH 090 or appropriate mathematics placement score is required.
This course is a review of the fundamental arithmetic and algebra operations. The topics include the numbers of ordinary arithmetic and their properties; integers and rational numbers; the solving of equations; polynomials and factoring; and an introduction to systems of equations and graphs.

MTH 100 Intermediate College Algebra 3-0-3
PREREQUISITE: A grade of “C” or higher in MTH 098 or MTH 092 or appropriate mathematics placement score is required.
This course provides a study of algebraic techniques such as linear equations and inequalities, quadratic equations, systems of equations, and operations with exponents and radicals. Functions and relations are introduced and graphed with special emphasis on linear and quadratic functions. This course does not apply toward the general core requirement for mathematics in the AA or AS degree programs.

MTH 103 Introduction to Technical Mathematics 3-0-3
PREREQUISITE: A grade of “C” or higher in MTH 098 or MTH 092 or appropriate mathematics placement score is required.
This course is designed for the student in technology needing simple arithmetic, algebraic, and right triangle trigonometric skills. This course does not apply toward the general core requirements for math.

MTH 110 Finite Mathematics 3-0-3
PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher (S if taken as pass/fail) Intermediate College Algebra.
This course is intended to give an overview of topics in finite mathematics together with their applications, and is taken primarily by students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take Calculus). This course will draw on and significantly enhance the student’s arithmetic and algebraic skills. The course includes sets, counting, permutations, combinations, basic probability (including Baye’s Theorem),...
and introduction to statistics (including work with Binomial Distributions and Normal Distributions), matrices and their applications to Markov chains and decision theory. Additional topics may include symbolic logic, linear models, linear programming, the simplex method and applications.

**MTH 112 Precalculus Algebra** 3-0-3
PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with C or higher (S if taken as pass/fail) Intermediate College Algebra.

This course emphasizes the algebra of functions - including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer’s Rule, and mathematical induction.

**MTH 113 Precalculus Trigonometry** 3-0-3
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with C or higher (S if taken as pass/fail) MTH 112.

This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre’s Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems.

**MTH 115 Precalculus Algebra & Trigonometry** 4-0-4
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with C or higher (S if taken as pass/fail) MTH 110 and receive permission from the department chairperson.

This course is a one semester combination of Precalculus Algebra and Precalculus Trigonometry intended for superior students. The course covers the following topics: the algebra of functions (including polynomial, rational, exponential, and logarithmic functions), systems of equations and inequalities, quadratic inequalities, and the binomial theorem, as well as the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations, vectors, complex numbers, DeMoivre’s Theorem, and polar coordinates.

**MTH 116 Mathematical Applications** 3-0-3
PREREQUISITE: A grade of “C” or higher in MTH 090 or appropriate mathematics placement score is required.

This course provides practical applications of mathematics and includes selected topics from consumer math and algebra. Some topics included are integers, percent, interest, ratio and proportion, metric system, probability, linear equations, and problem solving.

**MTH 118 Technical Mathematics** 3-0-3
PREREQUISITE: MTH 100 or MTH 103 or appropriate mathematics placement score.

This course includes selected topics from algebra, analytic geometry, and trigonometry with emphasis on applications to engineering technology. Topics include variation, determinants, conic sections, exponential and logarithmic functions, and solutions of right triangles. This course does not apply toward the general core requirement for mathematics.

**MTH 120 Calculus and Its Applications** 3-0-3
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with C or higher MTH 112.

This course is intended to give a broad overview of calculus and is taken primarily by students majoring in Commerce and Business Administration. It includes differentiation and integration of algebraic, exponential, and logarithmic functions and applications to business and economics. The course should include functions of several variables, partial derivatives (including applications), Lagrange Multipliers, L’Hôpital’s Rule, and multiple integration (including applications).

**MTH 125 Calculus I** 4-0-4
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with C or higher MTH 113 or MTH 115.

This is the first of three courses in the basic calculus sequence taken primarily by students in science, engineering, and mathematics. Topics include the limit of a function; the derivative of algebraic, trigonometric, exponential, and logarithmic functions; and the definite integral and its basic applications to area problems. Applications of the derivative are covered in detail, including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus.

**MTH 126 Calculus II** 4-0-4
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with C or higher MTH 125.

This is the second of three courses in the basic calculus sequence. Topics include vectors in the plane and in space, lines and planes in space, applications of integration (such as volume, arc length, work and average value), techniques of integration, infinite series, polar coordinates, and parametric equations.

**MTH 227 Calculus III** 4-0-4
PREREQUISITE: A grade of “C” or higher in MTH 126.

This is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, partial derivatives (including applications), quadric surfaces, multiple integration, and vector calculus (including Green’s Theorem, Curl and Divergence, surface integrals, and Stokes’ Theorem).

**MTH 231 Math for the Elementary Teacher I** 3-0-3
This course is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient at performing basic arithmetic operations. Topics include logic, sets and functions, operations and properties of whole numbers and integers including number theory; use of manipulatives by teachers to demonstrate abstract concepts; and by students while learning these abstract concepts as emphasized in the class. Upon completion, students are required to demonstrate proficiency in each topic.
studied as well as to learn teaching techniques that are grade level and subject matter appropriate, and test for mathematical proficiency and the learning of teaching concepts.

+MTH 237 Linear Algebra 3-0-3
PREREQUISITE: A grade of "C" or higher in MTH 126.
This course introduces the basic theory of linear equations and matrices, real vector spaces, bases and dimension, linear transformations and matrices, determinants, eigenvalues and eigenvectors, inner product spaces, and the diagonalization of symmetric matrices. Additional topics may include quadratic forms and the use of matrix methods to solve systems of linear differential equations. This course is offered upon sufficient enrollment.

+MTH 238 Applied Differential Equations I 3-0-3
COREQUISITE: MTH 227.
This course is an introduction to numerical methods, qualitative behavior of first order differential equations, techniques for solving separable and linear equations analytically, and applications to various models (e.g. populations, motion, chemical mixtures, etc.); techniques for solving higher order linear differential equations with constant coefficients (general theory, undetermined coefficients, reduction of order and the method of variation of parameters), with emphasis on interpreting the behavior of the solutions, and applications to physical models whose governing equations are of higher order; the Laplace transform as a tool for the solution of initial value problems whose inhomogeneous terms are discontinuous. This course is offered upon sufficient enrollment.

+MTH 246 Mathematics of Finance 3-0-3
PREREQUISITE: A grade of "C" or higher in MTH 098, MTH 092, or MTH 116 or appropriate mathematics placement score.
This course explores mathematical applications relevant to business practices. Topics covered include simple and compound interest, credits, trade and bank discounts, annuities, amortization, depreciation, stocks and bonds, insurance, capitalization, and perpetuities. This course does not meet the general core requirement for mathematics.

+MTH 265 Elementary Statistics 3-0-3
PREREQUISITE: A grade of "C" or higher in MTH 100.
This course provides an introduction to methods of statistics, including the following topics: sampling, frequency distributions, measures of central tendency, graphic representation, reliability, hypothesis testing, confidence intervals, analysis, regression, estimation, and applications. Probability, permutations, combinations, binomial theorem, random variables, and distributions may be included.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

**MAT 101 Medical Terminology 3-0-3**
This course is designed for medical assistants, student nurses, and others in medically related fields. The course will focus on the more common prefixes, roots, and suffixes used to construct medical terms with these word parts to determine the meanings of new or unfamiliar terms. The student will learn a system of word building which will enable them to interpret medical terms.

**MAT 102 Medical Assisting Theory I 3-0-3**
A description of anatomical descriptors and the cell introduces the student to and serves as an overview of the body's systems. The structure and function of the nervous, sensory, integumentary, muscular, skeletal, respiratory, and cardiovascular systems are taught with the diseases related to these systems presented. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems.

**MAT 103 Medical Assisting Theory II 3-0-3**
The structure and function of the digestive, urinary, reproduction, endocrine, and immune systems are presented. Disease processes that are related to these systems will be included. Basic concepts of reproduction, growth and development, and nutrition are taught. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems.

**MAT 111 Clinical Procedures I for the Medical Assistant 2-1-3**
This course includes instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with examination, and patient education. Upon completion, students will be able to demonstrate competence in exam room procedures.

**MAT 120 Medical Administrative Procedures I 2-1-3**
This course introduces medical office administrative procedures. Topics include appointment scheduling, telephone techniques, managing the physician's schedule, handling mail, preparing and maintaining medical records, and patient orientation. Upon completion, students should be able to perform basic medical secretarial skills.

**MAT 121 Medical Administrative Procedures II 2-1-3**
This course introduces medical office administrative procedures not covered in Medical Administrative Procedures I. Topics include fees, credit, and collections, banking, bookkeeping Payroll, and computerized finance applications. Upon completion students should be able to manage financial aspects of medical offices.

**MAT 125 Laboratory Procedures I for the Medical Assistant 2-1-3**
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 diagnostic test, such as a CBC, 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.

**MAT 128 Medical Law and Ethics for the Medical Assistant 3-0-3**
This course provides basic information related to the legal relationship of patient and physician. Topics to be covered include creation and termination of contracts, implied and informed consent, professional liability, invasion of privacy, malpractice, tort, liability, breach of contract, and the Medical Practice Act. Upon completion, students should be able to recognize ethical and legal implications of these topics as they relate to the medical assistant.
MAT 200 Management of Office Emergencies 2-0-2
Prerequisite: A grade of "C" or higher in MAT 111.
This course is designed to instruct students in handling emergencies in the medical office. Emergencies presented will include cardiovascular emergencies, diabetic emergencies, seizures, syncope, hyperthermia and hypothermia shock, musculoskeletal emergencies, and poisoning. Upon completion, students should be able to recognize emergency situations and take appropriate actions.

MAT 211 Clinical Procedures II for the Medical Assistant 2-1-3
Prerequisite: A grade of "C" or higher in MAT 111.
This course includes instruction in vital signs and special examination procedures. Emphasis is placed on interviewing skills, appropriate triage and preparing patients for diagnostic procedures. Upon completion, students should be able to assist with special procedures.

MAT 215 Laboratory Procedures II for the Medical Assistant 2-1-3
Prerequisite: A grade of "C" or higher in MAT 125.
This course instructs the student in the fundamental theory and lab application for the medical office. Microbiology, urinalysis, serology, blood chemistry, and venipuncture theory as well as venipuncture collection procedures are discussed and performed. Upon completion, students should be able to perform basic lab tests/skills on course topics.

MAT 216 Pharmacology for the Medical Office 3-1-4
Prerequisite: A grade of "C" or higher in MAT 211.
This course teaches the commonly administered drugs used in the medical field including their classifications, actions, indications, contraindications, and side effects on the body. Correct demonstration of drug calculation, preparation, administration, and documentation are also taught. Upon completion, students should be able to demonstrate safe drug administration and recognize common medical classifications and their patient implications.

MAT 220 Medical Office Insurance 2-1-3
In this course emphasis is placed on insurance procedures with advanced diagnostic and procedural coding in the outpatient facility. Study will include correct completion of insurance forms and coding. Upon completion, students should be able to demonstrate proficiency in coding for reimbursements.

MAT 228 Medical Assistant Review Course 1-0-1
This course includes a general review of administrative and clinical functions performed in a medical office. The course will assist the student or graduate in preparing for national credentialing examination.

MAT 229 Medical Assisting Preceptorship 0-3-3
This course is designed to provide the opportunity to apply clinical, laboratory, and administrative skills in a physician's office, clinic or outpatient facility. The student will gain experience in applying knowledge learned in the classroom in enhancing competence, in strengthening professional communications and interactions. Upon completion, students should be able to perform as an entry-level Medical Assistant.

MAT 239 Phlebotomy Preceptorship 0-3-3
This course is designed to provide the opportunity to apply phlebotomy techniques in the physician's clinic and hospital setting. Emphasis is placed on training individuals to properly collect and handle blood specimens for laboratory testing and to interact with health care personnel, patients, and the general public. Upon completion, students should be prepared for entry-level phlebotomy and to sit for the Phlebotomy Technician Examination.

MAT 242 Transcription Preceptorship 0-3-3
This course is designed to provide the opportunity to apply transcription skills to the physician's office or the hospital. The student will gain experience in applying knowledge learned in transcription classroom to medical office dictation. Upon completion, students should be able to demonstrate entry-level transcription skills.

Music (MUS)

MUS 100 Convocation 1-0-1
This course is designed to expose students to a variety of repertory styles and to give students an opportunity to practice individual performance skills. Emphasis is placed on exposure to performances and lectures by guest artists, faculty or students, and on personal performance(s) in class each semester.

MUS 101 Music Appreciation 3-0-3
This course is designed for non-music majors and requires no previous musical experience. It is a survey course that incorporates several modes of instruction including lecture, guided listening, and similar experiences involving music. The course will cover a minimum of three (3) stylistic periods, provide a multi-cultural perspective, and include both vocal and instrumental genres. Upon completion, students should be able to demonstrate a knowledge of music fundamentals, the aesthetic/stylistic characteristics of historical periods, and an aural perception of style and structure in music.

MUS 103 Survey of Popular Music 1-2-0-1/2
This course provides a study of the origins, development and existing styles of popular music. Topics include ragtime, jazz, rhythm and blues, rock, country and western, folk and world music. Upon completion, students should be able to demonstrate a knowledge, understanding and an aural perception of the stylistic characteristics of popular music.

MUS 104 Jazz: An Introduction and History 1-2-0-1/2
This course provides a study of the origins, development and existing styles of jazz. Topics include the blues, piano styles, Dixieland, swing, bebop, third stream, cool, free jazz and jazz/rock fusion. Upon completion, students should be able to demonstrate a knowledge, understanding and an aural perception of the different style characteristics of jazz music.

MUS 110 Basic Musicianship 3-0-3
PREREQUISITE: Permission of the instructor.
This course is designed to provide rudimentary music knowledge and skills for the student with a limited music background. Topics include a study of notation, rhythm, scales, keys, intervals, chords and basic sight singing and ear training skills. Upon completion, students should be able to read and understand musical scores and demonstrate basic sight singing and ear training skills for rhythm, melody and harmony.

MUS 111 Music Theory I 3-0-3
PREREQUISITE: MUS 110 or suitable placement score or permission of the instructor.
COREQUISITE: MUS 113, if ear training lab is a separate course.
This course introduces the student to the diatonic harmonic
practices in the Common Practice Period. Topics include fundamental musical materials (rhythm, pitch, scales, intervals, diatonic harmonies) and an introduction to the principles of voice leading and harmonic progression. Upon completion, students should be able to demonstrate a basic competency using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills.

**MUS 112 Music Theory II** 3-0-3
PREREQUISITE: MUS 111
COREQUISITE: MUS 114, if ear training lab is a separate course. This course completes the study of diatonic harmonic practices in the Common Practice Period and introduces simple musical forms. Topics include principles of voice leading used in three- and four-part triadic harmony and diatonic seventh chords, non-chord tones, cadences, phrases and periods. Upon completion, students should be able to demonstrate competence using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills.

**MUS 113 Music Theory Lab I** 0-2-1
PREREQUISITE: MUS 110 or suitable placement score or permission of the instructor.
COREQUISITE: MUS 111, if ear training lab is a separate course. This course provides the practical application of basic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, simple triads, diatonic stepwise melodies, basic rhythmic patterns in simple and compound meter and four-part triadic progressions in root position. Upon completion, students should be able to write, sing and play intervals, scales, basic rhythmic patterns, diatonic stepwise melodies, simple triads and short four-part progressions in root position.

**MUS 114 Music Theory Lab II** 0-2-1
PREREQUISITE: MUS 113.
COREQUISITE: MUS 112, if ear training lab is a separate course. This course continues the practical application of diatonic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, scales, diatonic melodies with triadic arpeggiation, more complex rhythmic patterns in simple and compound meter and four-part diatonic progressions in all inversions. Upon completion, students should be able to write, sing and play all intervals, rhythmic patterns employing syncopations and beat divisions, diatonic melodies and four-part diatonic progressions.

**MUS 115 Fundamentals of Music** 3-0-3
This course is designed to teach the basic fundamentals of music and develop usable musical skills for the classroom teacher. Topics include rhythmic notation, simple and compound meters, pitch notation, correct singing techniques, phrases, keyboard awareness, key signatures, scales, intervals and harmony using I, IV, and V with a chordal instrument. Upon completion, students should be able to sing a song, harmonize a simple tune, demonstrate rhythmic patterns and identify musical concepts through written documentation.

**MUS 161 Diction for Singers** 2/3-0-2/3
PREREQUISITE: Permission of the instructor. This course introduces the basic rules of diction in Italian, French and German for singers. Emphasis is placed on the use of the International Phonetic Alphabet. Upon completion, students should be able to sing art songs in Italian, French and German with correct diction.

**MUS 170 Introduction to Church Music** 2/3-0-2/3
This course provides an overview of church music as a career choice, and includes the organization and operation of a graded church choir program. Topics include an introduction to conducting, rehearsal techniques, administrative skills, and may include a supervised practicum field experience. Upon completion, students should be able to select, prepare, teach and conduct a simple anthem for a graded church choir and demonstrate a knowledge of church music administration through written documentation.

**MUS 171 Service Playing** 1/2-0-1/2
PREREQUISITE: Permission of the instructor. This course provides individual or group instruction in skills relevant to playing a keyboard instrument in religious services. Topics include hymn playing, accompanying soloists and choirs, selecting appropriate music for the different denominational services and improvisation. Upon completion, students should be able to demonstrate a knowledge and understanding of the role of the church pianist or organist through written documentation and by performing that role for a religious service.

**MUS 180 Piano Pedagogy Seminar** 1-0-1
PREREQUISITE: Permission of the instructor. This course is a seminar, workshop or master class conducted by guest artists or faculty for piano teachers and students. Emphasis is placed on piano pedagogy topics such as teaching methods, piano literature and performance practice. Upon completion, students should be able to demonstrate improved knowledge and skills related to piano pedagogy through written documentation and/or performance.

**MUS 201 Survey of Music Literature I** 3-0-3
PREREQUISITE: Permission of the instructor. This is the first of a two-course sequence which surveys instrumental and vocal music to acquaint the student with musical compositions, composers and styles from ancient times through the Baroque. Emphasis is placed on the development of analytical listening skills. Upon completion, students should be able to recognize the music, identify the major composers and describe the styles of the various musical periods.

**MUS 202 Survey of Music Literature II** 3-0-3
PREREQUISITE: Permission of the instructor. This is the second of a two-course sequence which surveys instrumental and vocal music to acquaint the student with musical compositions, composers and styles from the Classical Period to the present. Emphasis is placed on the development of analytical listening skills. Upon completion, students should be able to recognize the music, identify the major composers and describe the styles of the various musical periods.

**MUS 203 Music History I** 3-0-3
This course provides a study of the development of music from ancient times through the Baroque Period. Emphasis is placed on period style characteristics, representative composers and their works, and socio-cultural influences. Upon completion, students should be able to demonstrate knowledge, understanding and an aural perception of period style characteristics, forms, composers and representative works.
+MUS 204 Music History II 3-0-3
This course provides a study of the development of music from the Classical Period to the present. Emphasis is placed on period style characteristics, representative composers and their works, and socio-cultural influences. Upon completion, students should be able to demonstrate knowledge, understanding and an aural perception of period style characteristics, forms, composers and representative works.

MUS 211 Music Theory III 3-0-3
PREREQUISITE: MUS 112.
COREQUISITE: MUS 213, if ear training lab is a separate course.
This course introduces the student to the chromatic harmonic practices in the Common Practice Period. Topics include secondary functions, modulatory techniques, and binary and ternary forms. Upon completion, students should be able to demonstrate competence using chromatic harmony through analysis, writing, sight singing, dictation and keyboard skills.

MUS 212 Music Theory IV 3-0-3
PREREQUISITE: MUS 211.
COREQUISITE: MUS 214, if ear training lab is a separate course.
This course completes the study of chromatic harmonic practices in the Common Practice Period and introduces the student to twentieth-century practices. Topics include the Neapolitan and augmented sixth chords, sonata form, late nineteenth-century tonal harmony and twentieth-century practices and forms. Upon completion, students should be able to demonstrate competence using chromatic harmony and basic twentieth century techniques through analysis, writing, sight singing, dictation and keyboard skills.

MUS 213 Music Theory Lab III 0-2-1
PREREQUISITE: MUS 114.
COREQUISITE: MUS 211, if ear training lab is a separate course.
This course provides the practical application of chromatic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include melodies with simple modulations, complex rhythms in simple and compound meter, and secondary function chords. Upon completion, students should be able to write, sing and play modulating melodies, rhythmic patterns with beat subdivisions and four-part chromatic harmony.

MUS 214 Music Theory Lab IV 0-2-1
PREREQUISITE: MUS 213.
COREQUISITE: MUS 212, if ear training lab is a separate course.
This course provides the practical application of chromatic musical materials and simple twentieth century practices through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include chromatic and atonal melodies; complex rhythmic patterns in simple, compound and asymmetric meters; chromatic chords and twentieth-century harmony. Upon completion, students should be able to write, sing and play chromatic and atonal melodies, complex rhythms and meters, four-part chromatic harmony and simple twentieth-century chord structures.

+MUS 215 Composition I 1/2-0-1/2
PREREQUISITE: MUS 112 or permission of the instructor.
This course introduces the basic techniques and applications of musical composition. Emphasis is placed on creativity and original thought processes in music. Upon completion, students should be able to create an original musical composition.

+MUS 216 Composition II 1/2-0-1/2
PREREQUISITE: MUS 215.
This course provides more advanced instruction in musical composition techniques. Emphasis is placed on musical thought processes which result in musical composition. Upon completion, students should be able to create, notate correctly and stage performances of original musical compositions.

+MUS 217 Jazz Improvisation 1-3/0-1-3
PREREQUISITE: Permission of the instructor.
This course is designed to prepare the student with the theoretical background and improvisational techniques utilized in jazz performance. Emphasis is placed on the understanding of chord structures, chord progressions, scale structures and melodic design. Upon completion, students should be able to perform an improvisational solo with a jazz ensemble.

+MUS 251 Introduction to Conducting 3-0-3
PREREQUISITE: MUS 110 or permission of the instructor.
This course introduces the fundamentals of conducting choral and/or instrumental ensembles. Topics include a study of simple and compound meters, score reading and techniques for conducting effective rehearsals. Upon completion, students should be able to prepare and conduct a choral and/or instrumental score in a rehearsal or performance setting.

+MUS 270 Organization of the Church Music Program 2/3-0-2/3
PREREQUISITE: Permission of the instructor.
This course is designed to explore administrative models of a comprehensive church music program. Topics include leadership, administrative structure, music personnel, facilities, equipment, vestments, music library, budgeting, planning, vocal and instrumental ensembles and scheduling for a music program. Upon completion, students should be able to demonstrate how to plan, coordinate and administer a comprehensive church music program.

+MUS 271 Church Music Literature 2/3-0-2/3
PREREQUISITE: MUS 170 or permission of the instructor.
This course provides an historic survey of traditional church music from the 17th century to the present and introduces contemporary Christian styles. Topics include criteria for choosing appropriate music for graded church choirs at easy, medium and advanced levels of difficulty, and a survey of publishing resources and cataloging systems. Upon completion, students should be able to demonstrate a knowledge and understanding of church music literature.

+MUS 272 The Children’s Choir 2/3-0-2/3
PREREQUISITE: Permission of the instructor.
This course is designed to provide techniques for working with the child’s voice in a choral setting. Topics include working with children’s voices, rehearsal techniques, selecting literature, vestments and organizing a graded choir program. Upon completion, students should be able to demonstrate how to plan, coordinate and administer a graded choir program in a church.

+MUS 273 Literature for the Church Soloist 2/3-0-2/3
PREREQUISITE: Permission of the instructor.
This course is designed to acquaint the singer with literature appropriate for use in services of worship. Topics include voice classification, study of the literature for general and seasonal use, and resources for publications and materials.
Upon completion, students should be able to demonstrate a knowledge and understanding of repertoire suitable for use throughout the church year, sources of solo literature and vocal classification.

+MUS 279 Church Music Practicum 0-2-1
PREREQUISITE: Permission of the instructor.
This course is designed to provide supervised experience in the various areas of church music through directed study, practice, observation and other supervised experiences. Emphasis is placed on designing, implementing and documenting a practicum project related to a particular area of church music. Upon completion, students should be able to produce documentation that demonstrates the scope of the project.

+MUS 290 Introduction to Commercial Music 2/3-0-2/3
This course provides an introduction to the commercial music industry and the types of careers in commercial music. Topics include music publishing, recording, contracts, agents and managers, copyrights, unions, music companies and dealers. Upon completion, students should be able to demonstrate a basic knowledge and understanding of the different components of the commercial music industry and the various career options.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Music Ensemble (MUL)

Class Performance Instruction 0-2-1
Group instruction is available in voice, piano, strings, woodwinds, brass, percussion and fretted instruments for students with little or no previous training. Emphasis is placed on the rudiments of music, basic performance technique and general musicianship skills. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in singing or playing and a knowledge of music fundamentals.

MUL 101-02; 201-02 CLASS PIANO I, II, III, IV
MUL 111-12; 211-12 CLASS VOICE I, II, III, IV
MUL 121-22; 221-22 CLASS STRINGS I, II, III, IV
MUL 131-32; 231-32 CLASS WOODWINDS I, II, III, IV
MUL 151-52; 251-52 CLASS PERCUSSION I, II, III, IV
MUL 161-62; 261-62 CLASS FRETED INSTR. I, II, III, IV

MUL 170-71, 270-71 Music Workshop I, II, III, IV 0-2-1
PREREQUISITE: Permission of the instructor.
This course is a seminar clinic in advanced rehearsal/ performance techniques. Emphasis is placed on intensive rehearsal techniques required for advanced or specialized performance groups. Upon completion, students should be able to effectively participate in performances presented by this type of ensemble.

MUL 172-73, 272-73 Musical Theatre Workshop I, II, III, IV 0-4-2
PREREQUISITE: Permission of the instructor.
This course includes the study of musical theater history, styles, performance and technical production. Emphasis is placed on the supervised study, preparation, production and performances of scenes or complete works of musical theater. Upon completion, students should be able to effectively participate in a public presentation of the prepared scenes or work in an assigned performance or technical role.

Music Ensembles 0-2-1
PREREQUISITE: Permission of the instructor.
This course provides an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Upon completion, students should be able to effectively participate in performances presented by the ensemble.

MUL 180-81; 280-81 CHORUS I, II, III, IV
MUL 182-83; 282-83 VOCAL ENSEMBLE I, II, III, IV
MUL 184-85; 284-85 JAZZ/SHOW CHOIR I, II, III, IV
MUL 190-91; 290-91 CONCERT BAND I, II, III, IV
MUL 192-93-929-3 INSTRUMENTAL ENSEMBLE I, II, III, IV
MUL 196-97; 296-97 JAZZ/SHOW BAND I, II, III, IV

Music Performance (MUP)

Individual Performance Instruction 0-.5-1
PREREQUISITE: Permission of the instructor.
Individual performance instruction is available in keyboard instruments, voice, strings, woodwinds, brass, percussion and fretted instruments. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. Upon completion, students should be able to effectively perform assigned repertoire and technical studies in an appropriate performance evaluation setting.

+MUP 101-02; 201-02 PRIVATE PIANO I, II, III, IV
+MUP 111-12; 211-12 PRIVATE VOICE I, II, III, IV
+MUP 133-34; 233-34 PRIVATE GUITAR I, II, III, IV
+MUP 141-42; 241-42 PRIVATE FLUTE I, II, III, IV
+MUP 143-44; 243-44 PRIVATE CLARINET I, II, III, IV
+MUP 145-46; 245-46 PRIVATE SAXOPHONE I, II, III, IV
+MUP 151-52; 251-52 PRIVATE OBOE I, II, III, IV
+MUP 153-54; 253-54 PRIVATE BASSOON I, II, III, IV
+MUP 161-62; 261-62 PRIVATE TRUMPET I, II, III, IV
+MUP 163-64; 263-64 PRIVATE FRENCH HORN I, II, III, IV
+MUP 165-66; 265-66 PRIVATE MELLOPHONE I, II, III, IV
+MUP 171-72; 271-72 PRIVATE TROMBONE I, II, III, IV
+MUP 173-74; 273-74 PRIVATE EUPHONIUM I, II, III, IV
+MUP 175-76; 275-76 PRIVATE Tuba I, II, III, IV
+MUP 181-82; 281-82 PRIVATE PERCUSSION I, II, III, IV

MUP courses are limited to music majors or minors only.

Nurse Assistant (NAS)*

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

NAS 100 Long Term Care Nursing Assistant 3-3C-4
This course fulfills the eighty (80) hour OBRA requirements for training of long-term care nursing assistants for certification through competency evaluation. Emphasis is placed on the development of the knowledge, attitudes, and skills required of the long-term care nursing assistant. Upon completion, students should demonstrate satisfactory performance on written examinations and clinical skills.
SKILLS LABORATORY/CLINICAL PRACTICE (S OR C) -
Three hours of skills laboratory or clinical practice under the supervision of an instructor.

PRECEPTORSHIP (P3) - Three hours of clinical experience per week under the supervision of a health care professional who is currently licensed, has expertise in the selected clinical area, and serves as a facilitator of learning.

Nursing (NUR)
This information reflects the new statewide curriculum development by ACCS effective 05/06. Every effort has been made to assure accuracy. Please contact your nursing advisor for any further information.

NUR 102 Fundamentals of Nursing 3-6S-3C-6
PREREQUISITES: Per Nursing Department Policies.
CO-REQUISITES: NUR 103, NUR 104, BIO 201, MTH per Program Policy
This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students learn concepts and theories basic to the art and science of nursing. The role of the nurse as a member of the healthcare team is emphasized. Students are introduced to the concepts of client needs, safety, communication, teaching/learning, critical thinking, ethical-legal, cultural diversity, nursing history, and the program's philosophy of nursing. Additionally, this course introduces psychomotor nursing skills needed to assist individuals in meeting basic human needs. Skills necessary for maintaining microbial, physical, and psychological safety are introduced along with skills needed in therapeutic interventions. At the conclusion of this course students demonstrate competency in performing basic nursing skills for individuals with common health alterations.

NUR 103 Health Assessment 0-3S-1
PREREQUISITES: Per Nursing Department Policies.
CO-REQUISITES: NUR 102, NUR 104, BIO 201, MTH per Program Policy
This course is designed to provide students the opportunity to learn and practice history taking and physical examination skills with individuals of all ages, with emphasis on the adult. The focus is on symptom analysis along with physical, psychosocial, and growth and development assessments. Students will be able to utilize critical thinking skills in identifying health alterations, formulating nursing diagnoses and documenting findings appropriate to nursing.

NUR 104 Introduction to Pharmacology 0-3S-1
PREREQUISITES: Per Nursing Department Policies.
CO-REQUISITES: NUR 102, NUR 103, BIO 201, MTH per Program Policy
This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. This course introduces students to basic principles of pharmacology and the knowledge necessary to safely administer medication. Course content includes legal implications, pharmacokinetics, pharmacodynamics, calculations of drug dosages, medication administration, and an overview of drug classifications. Students will be able to calculate and administer medications.

NUR 105 Adult Nursing 5-3S-6C-8
PREREQUISITES: Per Nursing Department Policies, sequence NUR 102, NUR 103, NUR 104, BIO 201, MTH per Program Policy
CO-REQUISITES: NUR 106, ENG 101, BIO 202
This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Emphasis is placed on providing care to individuals undergoing surgery, fluid and electrolyte imbalance, and common alterations in respiratory, musculoskeletal, gastrointestinal, cardiovascular, endocrine, and integumentary systems. Nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 106 Maternal and Child Nursing 4-3C-5
PREREQUISITES: Per Nursing Department Policies, sequence NUR 102, NUR 103, NUR 104, BIO 201, MTH per Program Policy
CO-REQUISITES: NUR 105, ENG 101, BIO 202
This course focuses on the role of the nurse in meeting the physiological, psychosocial, cultural and developmental needs of the maternal and child client. Course content includes antepartal, intrapartal, and postpartal care, complications of pregnancy, newborn care, human growth and development, pediatric care, and selected pediatric alterations. Nutrition, pharmacology, cultural diversity, use of technology, communication, anatomy and physiology review, medical terminology, critical thinking, and application of the nursing process are integrated throughout this course. Upon completion of this course students will be able to provide and manage care for maternal and pediatric clients in a variety of settings.

NUR 107 Adult/Child Nursing 5-9C-8
PREREQUISITES: NUR 105, NUR 106, ENG 101, BIO 202
CO-REQUISITES: NUR 108, NUR 109
This course provides students with opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process in a variety of settings. Emphasis is placed on providing care to individuals experiencing complex alterations in sensory/perceptual reproductive, endocrine, genitourinary, neurological, immune, cardiovascular, and lower gastrointestinal systems. Additional instruction is provided for care for clients experiencing burns, cancer, and emergent conditions. Nutrition, pharmacology, therapeutic communication, community, cultural diversity, health promotion, error prevention, critical thinking, impacts on maternal and child clients are integrated throughout the course.

NUR 108 Psychosocial Nursing 2-3C-3
PREREQUISITES: NUR 105, NUR 106, ENG 101, BIO 202
CO-REQUISITES: NUR 107, NUR 109
This course is designed to provide an overview of psychosocial adaptation and coping concepts used when caring for clients with acute and chronic alterations in mental health in a variety of settings. Topics include therapeutic communication skills, normal and abnormal behaviors, treatment modalities, and developmental needs. Upon completion of this course, students will demonstrate the ability to assist clients in maintaining psychosocial integrity through the use of the nursing process.
NUR 109 Role Transition for the Practical Nurse 2-3S-3
PREREQUISITES: Successful completion of first and second term courses.
CO-REQUISITES: NUR 107, NUR 108
This course provides students with opportunities to gain knowledge and skills necessary to transition from student to practicing nurse. Content includes a discussion of current issues in health care, practical nursing leadership and management, professional practice issues, and transition into the workplace. Emphasis is placed on NCLEX-PN test-taking skills, computer-assisted simulations and practice tests, development of a prescriptive plan for remediation, and review of selective content, specific to the practice of practical nursing.

200 level courses are only for those students admitted to the ADN Program.

NUR 200 Nursing Career Mobility Assessment* 3-9S-6
PREREQUISITES: : MTH 100 or higher level math, BIO 201, 202, ENG 101
This course is designed to provide LPN mobility students with self-directed opportunities to prepare for placement into the third semester of the ADN program. Emphasis is on assessment and validation of selected theory, process, and skills covered in NUR 102,103,104,105, and 106. Upon successful completion of assessments, students are eligible for progression into NUR 201. Students who successfully complete this course are awarded 15 non-traditional hours at the completion of the LPN mobility curriculum.
*Availability of this course is dependent upon sufficient demand. See advisor for more information.

NUR 201 Nursing Through the Lifespan I 3-6C-5
PREREQUISITES: Successful completion of first and second term courses
CO-REQUISITES: PSY 200, BIO 220
This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in gastrointestinal, reproductive, sensory, and endocrine systems in a variety of settings. Additional instruction is provided for oncology, mental health, teaching/learning concepts, and advanced dosage calculations. Nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 202 Nursing Through the Lifespan II 3-9C-6
PREREQUISITES: Successful completion of first, second and third term courses
CO-REQUISITES: PSY 210, SPH 106, SPH 107, or SPH 116
This course builds upon previous instruction and provides additional opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in cardiovascular, hematologic, immune, and genitourinary systems in a variety of settings. Additional instruction is provided for psychiatric disorders, and high-risk obstetrics. Teaching/learning concepts, advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 203 Nursing Through the Lifespan III 4-6C-6
PREREQUISITES: Successful completion of first, second, third and fourth term courses
CO-REQUISITES: NUR 204, Humanities elective
This course builds upon previous instruction and provides additional opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in cardiovascular, respiratory, and neurological systems in a variety of settings. Additional instruction is provided care for selected mental health disorders, selected emergencies, multiple organ dysfunction syndrome and related disorders. Teaching/learning concepts, advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 204 Role Transition for the Registered Nurse 2-2(P3)-4
PREREQUISITES: Successful completion of first, second, third and fourth term courses
CO-REQUISITES: NUR 203, Humanities elective
This course provides students with opportunities to gain knowledge and skills necessary to transition from student to registered nurse. Content includes current issues in health care, nursing leadership and management, professional practice issues for registered nurses, and transition into the workplace. Additional instruction is provided for preparing for the NCLEX-RN

Office Administration (OAD)
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

OAD 100 Introduction to Keyboarding and Technology 3-0-3
This course is designed to enable the student to develop touch keyboarding skills for efficient use of the microcomputer through classroom instruction and lab exercises. Upon completion, the student should be able to demonstrate proper keying techniques and basic computer skills.

OAD 101 Beginning Keyboarding 3-0-3
PREREQUISITE: OAD 100 or high school keyboarding
This course is designed to enable the student to use the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on speed and accuracy in keying alphabetic, symbol, and numeric information using a keyboard. Upon completion, the student should be able to demonstrate proper technique and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memoranda, letters, reports, etc.

OAD 103 Intermediate Keyboarding 3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to assist the student in increasing speed and accuracy using the touch method of keyboarding through classroom instruction and lab exercises. Emphasis is on the production of business documents such as memoranda, letters, reports, tables, and outlines from unarranged rough draft to acceptable format. Upon completion, the student
should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of business documents.

OAD 104  Advanced Keyboarding  3-0-3
PREREQUISITE: OAD 103
This course is designed to assist the student in continuing to develop speed and accuracy using the touch method of keyboarding through classroom instruction and lab exercises. Emphasis is on the production of business documents using decision-making skills. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of high-quality business documents.

OAD 110  Computer Navigation  3-0-3
This course is designed to introduce the student to the MS Windows® environment through classroom instruction. Emphasis is on Windows as a graphical user interface and includes operations and applications that use the windows environment. Upon completion, the student should be able to demonstrate proficiency in the operation and management of hardware and software as defined by the course syllabus.

OAD 125  Word Processing  3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to provide the student with basic word processing skills through classroom instruction and outside lab. Emphasis is on the utilization of software features to create, edit, and print common office documents. Upon completion, the student should be able to demonstrate the ability to use industry-standard software to generate appropriately formatted, accurate, and attractive business documents such as memoranda, letters, and reports.

OAD 126  Advanced Word Processing  3-0-3
PREREQUISITE: OAD 125
This course is designed to increase student proficiency in using the advanced word processing functions. Emphasis is on the use of industry-standard software to maximize productivity. Upon completion, the student should be able to demonstrate the ability to generate complex documents such as forms, newsletters, and multi-page documents.

OAD 130  Electronic Calculations  3-0-3
This course is designed to give students a job-level competency in using the ten-key touch method and develop the student’s ability to solve common business problems with an electronic display-printing calculator. Emphasis is on basic mathematical functions in a business context. Upon completion, students will be able to perform basic electronic calculating at an acceptable rate of speed and accuracy.

OAD 131  Business English  3-0-3
This course is designed to develop the student’s ability to use proper English. Emphasis is on grammar, spelling, vocabulary, punctuation, word usage, word division, and proofreading. Upon completion, the student should be able to communicate effectively.

OAD 133  Business Communications  3-0-3
PREREQUISITE: OAD 131 or permission of the instructor
This course is designed to provide the student with skills necessary to communicate effectively. Emphasis is on the application of communication principles to produce clear, correct, logically-organized business communications. Upon completion, the student should be able to demonstrate effective communication techniques in written, oral, and nonverbal communications.

OAD 134  Career and Professional Development  3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to assist the student in preparing for employment. Emphasis is on developing resumes, improving interview techniques, participating in mock interviews, setting goals, conducting job searches, and improving personal and professional image. Upon completion, the student will be able to demonstrate confidence in seeking employment.

OAD 135  Financial Record Keeping  3-0-3
PREREQUISITE: OAD 135
This course is designed to provide the student with an understanding of the accounting concepts, principles, and terminology. Emphasis is on the accounting cycle and equation as they relate to different types of business ownership. Upon completion, the student should be able to demonstrate accounting procedures used in a proprietorship, partnership, and corporation.

OAD 137  Computerized Financial Record Keeping  3-0-3
PREREQUISITE: OAD 135
This course is designed to provide the student with skill in using the microcomputer to enter financial data through classroom instruction and outside lab. Emphasis is on the use of appropriate software in the preparation of journals, financial statements, and selected payroll records. Upon completion, the student will be able to demonstrate the ability to use a microcomputer system to record financial data.

OAD 138  Records/Information Management  3-0-3
This course is designed to give the student knowledge about managing office records and information. Emphasis is on basic filing procedures, methods, systems, supplies, equipment, and modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon completion, the student should be able to perform basic filing procedures.

OAD 200  Machine Transcription  3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to develop marketable skills in transcribing various forms of dictated material through classroom instruction. Emphasis is on the use of microcomputers and a commercial word processing package. Upon completion, the student should be able to accurately transcribe documents from dictated recordings.

OAD 202  Legal Transcription  3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to familiarize students with legal terms and provide transcription skill development in the production of legal correspondence, forms, and court documents through classroom instruction and lab exercises. Emphasis is on transcribing error-free legal documents using transcription equipment. Upon completion, students should be able to demonstrate the ability to accurately transcribe legal documents that are appropriately formatted.

OAD 203  Legal Office Procedures  3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course is designed to provide an awareness of the
responsibilities and opportunities of professional support personnel in a legal environment through classroom instruction and lab exercises. Emphasis is on legal terminology, the production of appropriate forms and reports, and the importance of office procedures and practices. Upon completion, the student should be able to perform office support tasks required for employment in a legal environment.

OAD 211 Medical Terminology 3-0-3
This course is designed to familiarize the student with medical terminology. Emphasis is on the spelling, definition, pronunciation, and usage of medical terms. Upon completion, the student should be able to communicate effectively using medical terminology.

OAD 212 Medical Transcription 3-0-3
PREREQUISITE: OAD 211 or permission of the instructor
This course is designed to orient students to standard medical reports, correspondence, and related documents transcribed in a medical environment through classroom instruction. Emphasis is on transcribing medical records from dictated recordings. Learn/maintain standards of ethical/professional conduct. Upon completion, the student should be able to accurately transcribe medical documents from dictated recordings.

OAD 214 Medical Office Procedures 3-0-3
PREREQUISITE: OAD 101 or permission of the instructor
This course focuses on the responsibilities of professional support personnel in a medical environment. Emphasis is on medical terms, the production of appropriate forms and reports, and office procedures and practices. Upon completion, the student should be able to perform office support tasks required for employment in a medical environment.

OAD 215 Health Information Management 3-0-3
PREREQUISITE: OAD 211
This course is designed to promote an understanding of the structure, analysis, and management of medical records. Emphasis is on managing medical and insurance records, coding of diseases, operations and procedures, and the legal aspects of medical records. Upon completion, the student should be able to maintain medical records efficiently.

OAD 216 Advanced Health Information Management 3-0-3
PREREQUISITE: OAD 215
This course is designed to promote an advanced understanding of the structure, analysis, and management of medical and insurance records. Emphasis is on managing medical and insurance records, coding of diseases, operations and procedures, and the legal aspects of medical records. Upon completion, the student should be able to maintain medical records efficiently.

OAD 217 Office Management 3-0-3
This course is designed to develop skills necessary for supervision of office functions. Emphasis is on issues relating to the combination of people and technology in achieving the goals of business in a culturally diverse workplace, including the importance of office organization, teamwork, workplace ethics, office politics, and conflict-resolution skills. Upon completion, the student should be able to demonstrate effective supervision in the modern office.

OAD 218 Office Procedures 3-0-3
PREREQUISITE: OAD 101
This course is designed to develop an awareness of the responsibilities and opportunities of the office professional through classroom instruction. Emphasis is on current operating functions, practices and procedures, work habits, attitudes, oral and written communications, and professionalism. Upon completion, the student should be able to demonstrate the ability to effectively function in an office support role.

OAD 231 Office Applications 3-0-3
This course is designed to provide the student with a foundation in the use of computerized equipment and application software as tools in the performance of a variety of office tasks through classroom instruction and lab exercises. Emphasis is on the role of the office professional in the selection and application of appropriate technology to the specific task or combination of tasks. Upon completion, the student should be able to demonstrate proficiency in the selection of appropriate computerized tools to complete designated tasks.

OAD 233 Trends in Office Technology 3-0-3
This course is designed to research current trends in office technology. Emphasis is on advances in technology relevant to the office environment such as electronic mail, multimedia interaction, presentation hardware and software, and Internet use. Upon completion, the student should be able to demonstrate an awareness of current technological applications for the modern office.

OAD 242 Office Internship 0-3-0
PREREQUISITE: Completion of at least 50% of OAD course work or permission of the instructor.
This course is designed to provide the student with the opportunity to work in an office environment. Emphasis is on the efficient and accurate performance of job tasks. Upon completion, the student should be able to demonstrate successful performance of skills required in an office support position.

OAD 247 Special Projects 3-0-3
This course is designed to provide the student with an opportunity for the expansion of knowledge in an area of special interest under the direct supervision of instructor. Emphasis is on the student’s use of modern technology to study, research, or improve skills in a specialized office support area. Upon completion, the student should be able to demonstrate enhanced knowledge and skill gained through an individualized project.

Orientation (ORI)

ORI 105 Student Success for Developmental Students 3-0-3
This course is designed to orient students to the college experience by providing them with tools needed for academic and personal success. Topics include: developing an internal focus of control, time management and organizational skills, critical and creative thinking strategies, personal and professional maturity, and effective study skills for college and beyond.

ORI 107 Student Success 1-0-1
This course is designed to provide students with information to improve their success as students in a college environment. Specific topics include stress management, time management, goal setting, improving listening and note taking skills, identification of optimum learning styles, reading skills, study
skills, problem solving and decision making, test taking strategies, and financial management.

**Philosophy (PHL)**

+ PHL 106  Introduction to Philosophy  3-0-3
This course is an introduction to the basic concepts of philosophy. The literary and conceptual approach of the course is balanced with emphasis on approaches to ethical decision making. The student should have an understanding of major philosophical ideas in a historical survey from the early Greeks to the modern era.

+ PHL 206  Ethics and Society  3-0-3
This course involves the study of ethical issues which confront individuals in the course of their daily lives. The focus is on the fundamental questions of right and wrong, of human rights, and of conflicting obligations. The student should be able to understand and be prepared to make decisions in life regarding ethical issues.

+ Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

**Physical Education (PED)**

Availability of courses in this program is dependent upon student enrollment, except for PED 103, PED 104, PED 105, PED 118, and PED 119. See master schedule of classes or advisor for further information.

PED 103  Weight Training (Beginning)  0-2-1
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED 104  Weight Training (Intermediate)  0-2-1
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.

PED 105  Personal Fitness  0-2-1
This course is designed to provide students with information allowing them to participate in a personally developed fitness program. Topics include cardiovascular, strength, muscular endurance, flexibility and body composition.

PED 106  Aerobics  0-2-1
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

PED 107  Aerobics Dance (Beginning)  0-2-1
PREREQUISITE: PED 106 or permission of the instructor.
This course introduces the fundamentals of step and dance aerobics. Emphasis is placed on basic stepping up, basic choreographed dance patterns, and cardiovascular fitness; and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic dance aerobics.

PED 108  Aerobics Dance (Intermediate)  0-2-1
PREREQUISITE: PED 107 or permission of the instructor.
This course provides a continuation of step aerobics. Emphasis is placed on a wide variety of choreographed step and dance patterns; cardiovascular fitness; and upper body, abdominal, and floor exercises. Upon completion, students should be able to participate in and design an aerobics routine.

PED 109  Jogging  0-2-1
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities.

PED 118  General Conditioning (Beginning)  0-2-1
This course provides an individualized approach to general conditioning utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness and conditioning programs. Upon completion, students should be able to set up and implement an individualized physical fitness and conditioning program.

PED 119  General Conditioning (Intermediate)  0-2-1
PREREQUISITE: PED 118 or permission of the instructor.
This course is an intermediate-level fitness and conditioning program 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 and conditioning program.

PED 123  Golf (Beginning)  0-1-1
This course emphasized the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

PED 124  Golf (Intermediate)  0-1-1
PREREQUISITE: PED 123 or permission of the instructor.
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.

PED 133  Tennis (Beginning)  0-1-1
This course emphasized the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

PED 134  Tennis (Intermediate)  0-1-1
PREREQUISITE: PED 133 or permission of the instructor.
This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.

PED 171  Basketball (Beginning)  0-1-1
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball.
PED 172 Basketball 0-1-1
PREREQUISITE: PED 171 or permission of the instructor.
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.

PED 176 Volleyball (Beginning) 0-1-1
This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

PED 177 Volleyball (Intermediate) 0-1-1
PREREQUISITE: PED 176 or permission of the instructor.
This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball.

PED 180 Flag Football 0-1-1
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.

PED 186 Softball (Beginning) 0-1-1
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.

PED 187 Softball (Intermediate) 0-1-1
This course presents advanced skills and competitive practice in softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in competitive softball.

PED 188 Yoga
This course introduces basic instruction in yoga for beginners. Emphasis is placed on instruction in gentle stretching, breathing practices, progressive deep relaxation, and posture. Upon completion, students should be able to participate in and appreciate the benefits of the activity.

PED 226 Hiking 0-1-1
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.

PED 236 Canoeing 0-1-1
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.

PED 246 Camping 0-1-1
This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping 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.

Physical Science (PHS)

PHS 111 Physical Science I 3-2-4
This course provides the non-technical student with an introduction to the basic principles of geology, oceanography, meteorology, and astronomy. Laboratory is required.

PHS 112 Physical Science II 3-2-4
PREREQUISITE: MTH 098 or math placement score.
This course provides the non-technical student with an introduction to the basic principles of chemistry and physics. Laboratory is required.

PHS 120 Environmental Science 3-2-4
This course is an interdisciplinary course designed to give the non-science major an introductory survey of the environment. The environment will be studied with an emphasis on topics such as air, soil, water, wild life, forestry, and solid waste pollution. Laboratory is required and will emphasize field studies and experimentation.

Physics (PHY)

PHY 115 Technical Physics 3-2-4
PREREQUISITE: MTH 100 or MTH 103.
Technical physics is an algebra-based physics course designed to utilize modular concepts to include motion, forces, torque, work energy, heat, wave/sound, light and electricity. Results of physics education research and physics applications in the workplace are used to improve the student’s understanding of physics in technical areas. Upon completion, students will be able to define motion and describe specific module concepts; utilize microcomputers to generate motion diagrams; understand the nature of contact forces and distinguish passive forces; work cooperatively to set-up laboratory exercises; and demonstrate applications of module-specific concepts.

PHY 120 Introduction to Physics 3-2-4
PREREQUISITE: MTH 098.
This course provides an introduction to general physics for non-science majors. Topics include fundamentals of mechanics, properties of matter, heat and temperature, electricity and magnetism, optics and modern physics. Laboratory is required. Offered upon sufficient enrollment.

PHY 201 General Physics I - Trig Based 3-2-4
PREREQUISITE: MTH 113 or equivalent, or permission of the instructor.
This course is designed to cover general physics at a level that assumes previous exposure to college algebra and basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. A laboratory is required.

PHY 202 General Physics II - Trig Based 3-2-4
PREREQUISITE: PHY 201.
This course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave motion, sound, light optics, electrostatics, circuits, magnetism, and modern physics. Laboratory is required.
PHY 205  Resitation in Physics I  1:1/0/1
This course will meet one hour weekly purely for problem solving. This course should be taken with PHY 201.

PHY 206  Resitation in Physics II  1:1/0/1
This course will meet one hour weekly purely for problem solving. This course should be taken with PHY 202.

PHY 213  General Physics with Calculus I  3-2-4
PREREQUISITE: MTH 125 or permission of the instructor.
This course provides a calculus-based treatment of the principle subdivisions of classical physics: mechanics and energy including Thermo-dynamics. Laboratory is required.

PHY 214  General Physics with Calculus II  3-2-4
PREREQUISITE: PHY 213.
This course provides a calculus-based study in classical physics. Topics include simple harmonic motion, waves, sound, light, optics, electricity and magnetism. Laboratory is required.

PHY 215  Resitation in Physics with Calculus I  1:1/0/1
This course will meet one hour weekly purely for problem solving. This course should be taken with PHY 213.

PHY 216  Resitation in Physics with Calculus II  1:1/0/1
This course will meet one hour weekly purely for problem solving. This course should be taken with PHY 214.

PHY 299  Directed Studies in Physics  1/2-0-1/2
Availability of this course is dependent upon sufficient demand. See advisor for further information.

Political Science (POL)
Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

POL 211  American National Government  3-0-3
This course surveys the background, constitutional principles, organization, and operation of the American political system. Topics include the U. S. Constitution, federalism, civil liberties, civil rights, political parties, interest groups, political campaigns, voting behavior, elections, the presidency, bureaucracy, Congress, and the justice system. Upon completion, students should be able to identify and explain relationships among the basic elements of American government and function as more informed participants of the American political system.

POL 220  State and Local Government  3-0-3
This course is a study of the forms of organization, functions, institutions, and operation of American state and local governments. Emphasis is placed on the variety of forms and functions of state and local governments, with particular attention to those in Alabama and to the interactions between state and local government and the national government. Upon completion, students should be able to identify elements of and explain relationships among the state, local, and national governments of the U.S., and function as more informed participants of state and local political systems.

POL 299  Directed Studies  0-0-1/3
PREREQUISITE: Recommendation of the instructor and approval of Department Chairperson.
This course provides opportunities for non-traditional exploration of selected topics in political science. Emphasis is placed on knowledge and experience students gain through learning activities such as guided reading, internships, and programs combining personal experience with related intensive study. Upon completion, students should be able to prepare papers, presentations, or other projects on approved topics related to their individual experiences.

*Credit to be determined from appropriate contact-to-credit ratio formula.

Psychology (PSY)

PSY 200  General Psychology  3-0-3
This course is a survey of behavior with emphasis upon psychological processes. This course includes the biological bases for behavior, thinking, emotion, motivation, and the nature and development of personality.

PSY 207  Psychology of Adjustment  3-0-3
This course provides an understanding of the basic principles of mental health and an understanding of the individual modes of behavior.

PSY 210  Human Growth and Development  3-0-3
PREREQUISITE: PSY 200.
This course is the study of the psychological, social, and physical factors that affect human behavior from conception to death.

PSY 230  Abnormal Psychology  3-0-3
PREREQUISITE: PSY 200.
This course is a survey of abnormal behavior and its social and biological origins. The anxiety related disorders, psychoses, personality disorders and mental deficiencies will be covered.

PSY 270  Business and Industry Psychology  3-0-3
PREREQUISITE: Permission of the instructor.
This course is a study of interpersonal relations in the working environment, interpersonal communications, and techniques for selection and supervision of personnel.

PSY 276  Human Relations  3-0-3
PREREQUISITE: Permission of the instructor.
This course focuses on readings, interpersonal experiences, individual testing, employer visits and open discussions. Its goal is to assist the student in making a successful transition from classroom to the world of work.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Reading (RDG)

RDG 085  Developmental Reading  3-0-3
This course is designed to assist students whose placement test scores indicate serious difficulty with decoding skills, comprehension, vocabulary, and study skills.

Religion (REL)

REL 100  History of World Religions  3-0-3
This course is designed to acquaint the student with the beliefs and practices of the major contemporary religions of the world. This includes the religions of Africa, the Orient, and the western
world. The student should have an understanding of the history and origins of the various religions in the world.

REG 151 Survey of the Old Testament 3-0-3
This course is an introduction to the content of the Old Testament with emphasis on the historical context and contemporary theological and cultural significance of the Old Testament. The student should have an understanding of the significance of the Old Testament writings upon completion of this course.

REL 152 Survey of the New Testament 3-0-3
This course is a survey of the books of the New Testament with special attention focused on the historical and geographical setting. The student should have an understanding of the books of the New Testament and the cultural and historical events associated with these writings.

Salon and Spa Management (SAL)

SAL 133 Salon Management Technology 1-6-3
PREREQUISITE: As required by program.
This course is designed to develop entry-level management skills for the beauty industry. Topics include job-seeking, leader and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon.

SAL 201 Entrepreneurship for Salon/Spa 3-0-3
PREREQUISITE: As required by program.
This course is covers the important issues and critical steps involved in starting a new business from scratch. Topics covered include developing a business plan, creating a successful marketing strategy, setting up the legal basis for business, raising start-up funds, attracting and managing human resources, managing costs, and developing a custom base.

Sociology (SOC)

SOC 200 Introduction to Sociology 3-0-3
This course is an introduction to the vocabulary, concepts, and theory of sociological perspectives of human behavior.

+SOC 208 Introduction to Criminology 3-0-3
This course delves into the nature and extent of crime in the United States, as well criminal delinquent behavior and theories of causation. The study includes criminal personalities, principles of prevention, control, and treatment.

+SOC 209 Juvenile Delinquency 3-0-3
PREREQUISITE: SOC 200.
This course examines the causes of delinquency. It also reviews programs of prevention, and control of juvenile delinquency, as well as the role of the courts.

SOC 210 Social Problems 3-0-3
PREREQUISITE: SOC 200.
This course examines the social and cultural aspects, influences, incidences and characteristics of current social problems in light of sociological theory and research.

SOC 247 Marriage and the Family 3-0-3
PREREQUISITE: SOC 200.
This course is a study of family structures and families in a modern society. It covers preparation for marriage, as well as sociological, psychological, biological, and financial factors relevant to success in marriage and family life.

+SOC 296 Directed Studies in Sociology 0-1-3
PREREQUISITE: SOC 200.
This course provides students with opportunities to have “hands-on” experience with research methods used in the behavioral sciences or to complete directed readings under faculty supervision.

+Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Spanish (SPA)

SPA 101 Introductory Spanish I 4-0-1
This course provides an introduction to Spanish. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas.

+SPA 102 Introductory Spanish II 4-0-1
PREREQUISITE: SPA 101 or equivalent. This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas.

+Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Speech (SPH)

SPH 107 Fundamentals of Public Speaking 3-0-3
PREREQUISITE: ENG 101 required; ENG 102 recommended.
This course explores principles of audience analysis and presenting of formal speeches to specific audiences. Educational foundations, communication theories and student performances are emphasized.

+SPH 226 Business and Professional Speech 3-0-3
PREREQUISITE: ENG 101 required; ENG 130 or ENG 102 recommended.
This course focuses on the fundamentals of speech applied to business and professional speech, reports, sales talks, conferences, interviews, speeches of goodwill, speeches of inspiration and courtesy, and after dinner speeches.

+Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Theater Arts (THR)

+THR 113 Theater Workshop I 2-0-2
This is the first in a six-course sequence which provide practical experience in the production and performance of a dramatic
presentation with assignments in scenery, lighting, props, choreography, sound, costumes, make-up, publicity, acting, directing, and other aspects of theater production.

+THR 114  Theater Workshop II  2-0-2
PREREQUISITE: THR 113.
This course is a continuation of THR 113.

+THR 115  Theater Workshop III  2-0-2
PREREQUISITE: THR 114.
This course is a continuation of THR 114.

+THR 120  Theater Appreciation  3-0-3
This course is designed to increase appreciation of contemporary theater. Emphasis is given to the theater as an art form through the study of history and theory of drama and its contributions to modern media. The course examines the roles of playwright, actor, director, designer and technician. Attendance at theater productions may be required.

+THR 126  Introduction to Theater  3-0-3
This course is designed to teach the history of the theater and the principles of drama. It also covers the development of theater production and the study of selected plays as theatrical presentations.

+THR 131  Acting Techniques I  3-0-3
This is the first of a two-course sequence in which the student will focus on the development of the body and voice as the performing instruments in acting. Emphasis is placed on pantomime, improvisation, acting exercises, a building characterizations in short acting scenes.

+THR 132  Acting Techniques II  3-0-3
PREREQUISITE: THR 131.
This course is a continuation of THR 131.

+THR 141  Introduction to Dance in Theater I  1/2-0-1/2
This is the first of a two-course sequence which offers the student an introduction to basic dance movements and the use of dance in dramatic productions.

+THR 142  Introduction to Dance in Theater II  1/2-0-1/2
PREREQUISITE: THR 141.
This course is a continuation of THR 141.

+THR 213  Theater Workshop IV  2-0-2
PREREQUISITE: THR 115.
This course is a continuation of THR 113-114-115.

+THR 214  Theater Workshop V  2-0-2
PREREQUISITE: THR 213.
This course is a continuation of THR 113, 114, 115.

+THR 215  Theater Workshop VI  2-0-2
PREREQUISITE: THR 214.
This course is a continuation of THR 113-114-115-214.

+THR 216  Theatrical Make-Up  2-0-2
This course is a study of the materials and techniques of theatrical make-up.

+THR 236  Stagecraft  3-0-3
This course is a study of the principles, techniques, and materials in theatrical scenery and lighting.

+THR 266  Fundamentals of Directing  3-0-3
This course is designed to cover the fundamentals of directing. Instruction will include lectures, demonstration, written and oral analysis of scripts and performances.

+THR 296  Directed Studies in Theater  2-0-2
This course deals with problems in theater and art management. Problems may be arranged in conjunction with other disciplines in the Fine Arts.

Availability of this course is dependent upon sufficient demand. See master schedule of classes or advisor for further information.

Water and Wastewater (WMT)

Availability of courses in this program is dependent upon student enrollment. See advisor for further information.

WMT 100  Water Supply and Wastewater Control  3-0-3
This course is designed to familiarize the student with water supply and wastewater control. Emphasis is on the engineering aspects of water supply, water distribution, wastewater collection, and wastewater treatment and disposal. Upon completion, students should be able to apply engineering and scientific concepts and principles of water supply and wastewater control.

WMT 101  Introduction to Water Treatment Processes  3-0-3
This course is designed to train prospective water treatment plant operators and managers in the practical aspects of operating and maintaining water treatment plants, with emphasis on the use of safe practices and procedures. Students will learn how to safely operate and maintain coagulation, flocculation, sedimentation, filtration, and disinfection processes. They will also learn how to control tastes and odors in drinking water, control corrosion to meet the requirements of the Lead and Copper Rule, perform basic water laboratory procedures, and solve arithmetic problems commonly associated with water treatment plant operations.

WMT 102  Introduction to Wastewater Treatment Processes  3-0-3
This course is designed to train prospective wastewater treatment plant operators and managers in the practical aspects of operating and maintaining wastewater treatment plants, with emphasis on the use of safe practices and procedures. Students will learn how to safely operate and maintain racks, screens, comminutors, sedimentation tanks, trickling filters, rotating biological contactors, package activated sludge plants, oxidation ditches, ponds, and chlorination facilities. Students will also learn how to analyze and solve operational problems and how to perform mathematical calculations relating to wastewater treatment process control.

WMT 111  Electrical and Mechanical Systems I  3-2-4
This course deals with pumps, generators, engines, meters, valves, and their related monitoring and safety, as they relate to treatment systems. Topics include an overview of electricity and electronics, hydraulics, and flow monitoring systems. Upon completion, students should be able to explain safety in treatment operations and the safe operations of these systems.

WMT 112  Electrical and Mechanical Systems II  3-2-4
This course is a continuation of WMT 111 which focuses on systems and their networking. Upon completion, students should be able to explain these systems, their function, and their problems in the industrial setting.
WMT 118  Public and Industrial Safety  3-0-3
This course is an overview of public and industrial safety issues related to industrial wastewater treatment. Topics include an in-depth study of laws and regulations and monitoring and alarm systems. Upon completion the student should be able to develop an area safety plan.

WMT 120  Sanitary Chemistry and Biology  3-0-3
This course is designed to acquaint the student with the fundamentals of microbiology and chemistry applicable to water and wastewater management. Emphasis is on laboratory procedures pertinent to water/wastewater treatment. Upon completion, students should be able to perform relevant laboratory procedures.

WMT 121  Water Analysis and Conversion  3-2-4
The course represents an in-depth study of treatment processes such as separation and conversion. Topics include toxicity analysis related to specific industries and how each industrial setting presents unique problems to be assessed, analyzed, and treated. Upon completion, students should be able to develop a treatment process plan for related industries.

WMT 201  Advanced Water Treatment Processes  3-0-3
This course is a continuation of WMT 101 and is designed to train prospective water treatment plant operators and managers in the practical aspects of operating and maintaining water treatment plants, with emphasis on the use of safe practices and procedures. Information is presented on drinking water regulations (including the Safe Drinking Water Act), iron and manganese control, fluoridation, softening, trihalomethanes, demineralization, handling and disposal of process wastes, maintenance, instrumentation, and advanced laboratory procedures.

WMT 202  Advanced Wastewater Treatment Processes  3-0-3
This course is designed to train prospective wastewater treatment plant operators and managers in the practical aspects of operating and maintaining wastewater treatment plants, with emphasis on the use of safe practices and procedures. Topics covered include conventional activated sludge processes, sludge digestion and solids handling, effluent disposal, plant safety and housekeeping, plant and equipment maintenance, laboratory procedures and chemistry, use of computers in plant operation and maintenance, analysis and presentation of data, and records and report writing. Students will also learn how to analyze and solve operational problems and how to perform the mathematical calculations relating to wastewater treatment process control.

WMT 210  Treatment Design  3-0-3
This course represents an in-depth look at treatment operations designed to remediate specific problems of industrial wastewater. Topics will include individual case studies as student projects to allow application of learning to actual real-life situations. Upon completion the student should be able to design a treatment plant process for a specific application.

+WMT 211  Biological Remediation  3-2-4
This course represents a review of the types of biological remediation currently used and those under study at research facilities. Topics will include specific applications and studies of local biological research to enhance student knowledge of this method of treatment and remediation. Upon completion, students should be able to analyze advantages and disadvantages of types of biological treatment for different industries.

WMT 213  Water and Wastewater Instrumentation and Controls  3-0-3
This course focuses on the basic fundamentals of instrumentation applicable to water and wastewater management. The application, maintenance, and calibration of instruments in water and wastewater systems are emphasized. Upon completion, students should be able to read, calibrate and maintain mechanical, electrical, hydraulic, and pneumatic sensing equipment, and indicating, recording, and control equipment.

WMT 214  Basic Hydraulics for Water and Wastewater Technology  3-0-3
This course is designed to provide the student with an understanding of practical hydraulic design related to water supply and wastewater control. Topics include the collection, treatment, and distribution of water and collection and treatment of domestic and industrial wastewater. Upon completion, students should be able to apply principles of hydraulic systems to water and wastewater management practices.

WMT 290  Industrial Internship I  0-15-3
This course is designed to allow a student first-hand experience in an industrial wastewater facility or a research facility. These placements will be coordinated through the wastewater treatment program and may include compensated or uncompensated placement.

WMT 291  Municipal Internship  0-15-3
This course is designed to allow a student first-hand experience in a municipal wastewater facility or a research facility. These placements will be coordinated through the wastewater treatment program and may include compensated or uncompensated placement.

Welding (WDT)*

Availability of courses in this program is dependent upon student enrollment. See master schedule of classes or advisor for further information.

WDT 108  SMAW Fillet/OFC  2-3-3
CO-REQUISITE: WDT 122.
This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting.

WDT 109  SMAW Fillet/PAC/CAC  2-3-3
CO-REQUISITE: WDT 123.
This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and
knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting.

**WDT 110  Industrial Blueprint Reading  3-0-3**

This course provides students with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations and weld symbols. Upon completion, students should be able to interpret welding symbols and blueprints as they apply to welding and fabrication.

**WDT 115  GTAW Carbon Pipe Theory  1-6-3**

**PRE-REQUISITE: WDT 228.**

**CO-REQUISITE: WDT 155.**

This course is designed to provide the student with the practices and procedures of welding carbon steel pipe using the gas tungsten arc weld (GTAW) process. Emphasis is placed on pipe positions, filler metal selection, purging gasses, joint geometry, joint preparation, and fit-up. Upon completion, students should be able to identify pipe positions, filler metals, purging gas, proper joint geometry, joint preparation, and fit-up to the applicable code.

**WDT 119  Gas Metal Arc/Flux Cored Arc Welding Theory  2-3-3**

**CO-REQUISITE: WDT 124.**

This course introduces the student to the gas metal arc and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification.

**WDT 120  Shielded Metal Arc Welding Groove Theory  2-3-3**

**PRE-REQUISITES: WDT 108 and WDT 109.**

**CO-REQUISITE: WDT 125.**

This course provides the student with instruction on joint design, joint preparation, and fit-up of groove welds in accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up. Upon completion, students should be able to identify the proper joint design, joint preparation and fit-up of groove welds in accordance with applicable welding codes.

**WDT 122  SMAW Fillet/OFI Lab  0-9-3**

**CO-REQUISITE: WDT 108.**

This course is designed to introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance with applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.

**WDT 123  SMAW Fillet/PAC/CAC Lab  0-9-3**

**CO-REQUISITE: WDT 109.**

This course is designed to introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per the applicable welding code.

**WDT 124  Gas Metal Arc/Flux Cored Arc Welding Lab  0-9-3**

**CO-REQUISITE: WDT 119.**

This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases.

**WDT 125  Shielded Metal Arc Welding Groove Lab  0-9-3**

**PRE-REQUISITE: WDT 122 and WDT 123.**

**CO-REQUISITE: WDT 120.**

This course provides instruction and demonstration in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes.

**WDT 155  GTAW Carbon Pipe Lab  0-9-3**

**PRE-REQUISITE: WDT 268.**

**CO-REQUISITE: WDT 115.**

This course is designed to provide the student with skills in welding carbon steel pipe with gas tungsten arc weld techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on carbon steel pipe with the prescribed filler metals in various positions in accordance with the applicable code.

**WDT 181  Special Topics Lab  0-3-3**

This course provides specialized instruction in various areas related to the welding industry. Emphasis is placed on meeting students needs.

**WDT 183  Special Topics  3-0-3**

This course allows the student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. The student will be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

**WDT 184  Special Topics  1-1-1**

This course allows the student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. The student will be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

**WDT 193  Co-op  0-3-3**

This course constitutes a series wherein the student works on a part-time basis in a job directly related to welding. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting.
WDT 217  SMAW Carbon Pipe Theory  1-6-3
PRE-REQUISITE: WDT 120.
CO-REQUISITE: WDT 257.
This course introduces the student to the practices and procedures of welding carbon steel pipe using the shielded metal arc weld (SMAW) process. Emphasis is placed on pipe positions, electrode selection, joint geometry, joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, electrodes, proper joint geometry, joint preparation, and fit-up in accordance with applicable codes. Perform those operations as per the applicable welding code.

WDT 219  Welding Inspection & Testing  3-0-3
This course provides the student with inspection skills and knowledge necessary to evaluate welded joints and apply quality control measures as needed. Emphasis is placed on interpreting welding codes, welding procedures, and visual inspection methods. Upon completion, students should be able to visually identify visual acceptable weldments as prescribed by the code or welding specification report.

WDT 228  Gas Tungsten Arc Welding Theory  2-3-3
CO-REQUISITE: WDT 268.
This course provides student with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT 257  SMAW Carbon Pipe Lab  0-9-3
PRE-REQUISITE: WDT 125.
CO-REQUISITE: WDT 217.
This course is designed to provide the student with skills in welding carbon steel pipe with shielded metal arc welding techniques in various pipe welding positions. Upon completion, students should be able to perform shielded metal arc welding on carbon steel pipe with the prescribed electrodes in various positions in accordance with the applicable codes.

WDT 268  Gas Tungsten Arc Lab  0-9-3
PREREQUISITE: WDT 228 and/or as required by college.
CO-REQUISITE: WDT 228.
This course provides students with skills needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.
Special Programs
Adult Education

- GED Preparation
- Academics Refreshment
- Workforce Credentialing
- English as a Second Language

The Adult Education Program gives adults age seventeen and older, who are not enrolled in school, the opportunity to prepare for the GED exam and/or strengthen skills in English, math, reading, writing, science, and social studies in order that they can attend college, obtain employment, or advance in current employment. Each learner is assessed and placed in a personally-prescribed study program.

As part of the workforce credentialing initiative in Alabama, the Adult Education Program aids in preparing adults for the WorkKeys assessment toward receiving a Career Readiness Certificate. This certificate documents skill levels obtained by the individual and aids in job application.

The Adult Education Program offers English as a Second Language instruction to foreign-born persons living in Northwest Alabama. Learners practice reading, writing, and speaking English needed to function in the United States. Learners are introduced to the English language through one-on-one and computer-assisted instruction. Learners are given information on steps to becoming a U.S. citizen, how to advance their education, and ways to improve their lives in Northwest Alabama.

Adult Education classes are available on both the Muscle Shoals and the Phil Campbell campuses and at various off-campus sites throughout the Northwest-Shoals Community College service district. Day and evening classes are offered, and an on-line option is also available for busy adults whose work schedules or other responsibilities do not allow them to attend classes. Classes are free of charge and all materials are provided. For information on current class locations and times, or other questions, please call the Adult Education Office at 256.331.5440.

GED Testing

The College offers General Educational Development (GED) testing on both campuses. The four test areas include Language Arts, Social Studies, Science, and Mathematics. Instruction at no charge, through Adult Education classes, is recommended prior to taking the GED exam. For information call 256.331.5443 (Shoals Campus) or 256.331.6297 (Phil Campbell Campus).

Wellness Program

Northwest-Shoals Community College’s fitness center is available to students and the community who are 16 years of age or older. The wellness program has been designed to help people achieve optimum health and well being through evaluation, education, and exercise.

The Fitness Center is located on the Shoals Campus in the multi-purpose center and on the Phil Campbell Campus in the gymnasium. Equipment includes a stair climber, stationary bicycles, recumbent bicycles, rowers, weight machines and treadmills.

After enrolling at the fitness center, an evaluation is given prior to beginning any exercises. Occasionally participants may need a release from their physician before being allowed to exercise. For more information call 256.331.5377 Shoals Campus or 256.331.6260 Phil Campbell Campus

Academy for Lifelong Learning

Senior Citizens Program

Offered through the College’s Community Services Program, the Academy for Lifelong Learning is an opportunity for senior citizens (age 55 and up) to continue expanding their minds as well as forming new friendships and engaging in new and exciting social activities. The yearly membership fee for the Academy is $80 ($40/Semester).

For more information call Malea Milstead 256.331.5297.

Training for Business and Industry

The Training for Business and Industry (TBI) Department located on the Shoals Campus works with area companies to meet specific training needs. If traditional classes, whether academic or technical, do not meet the employee development needs of a company, a TBI coordinator will work with company representatives to develop training programs, locate a qualified instructor to teach classes, and set the training to the company’s schedule. The coordinator will also monitor the class, along with company representatives, to make sure the employees are reaching the company’s desired outcomes.

For more information contact the Training for Business and Industry Director at 256.331.5289 or wgarner@nwscc.edu.

WorkKeys®

Across the country, employers, educators, labor organizations, and state agencies are working together to ensure that students and employees in their communities are adequately prepared for higher-skill, higher-wage jobs. Northwest-Shoals Community College serves as a contact for WorkKeys profiling, assessments, and skill training. WorkKeys®, ACT’s comprehensive system for improving the workforce, can serve as a rallying point for these efforts.

Using WorkKeys,

- Employers can identify and develop workers for a wide range of skilled jobs.
- Students and workers can document and advance their employability skills.
- Educators can tailor instructional programs to help students acquire the skills employers need.

By contributing to a stronger workforce, WorkKeys helps strengthen the nation’s economic health.

Workforce Investment Act (WIA)

This program is designed to help persons vocationally displaced who are economically disadvantaged.

Alabama’s Career Center Systems was developed to address the WIA principle requiring a One-Stop system of delivering services to customers. This system was designed to offer a
variety of services to customers through coordinated efforts of several agencies, including the Alabama Department of Economic and Community Affairs (ADECA), the Alabama Department of Industrial Relations (DIR), the Alabama Department of Rehabilitation Services (DRS), the Alabama Department of Education/Adult Education, the Alabama Department of Human Resources (DHR), the Alabama Department of Senior Services, the Alabama Department of Postsecondary Education, and Housing and Urban Development (HUD) Employment and Training Activities. Linkages and partnerships among agencies result in a cost-efficient, seamless environment for those customers who desire services.

Customers, as defined in WIA, are job seekers and employers. Job seekers receive services such as training, education, and other employment-related services depending upon their individual need. Employers have a single point of contact to provide information about current and future skills needed by their workers and to list job openings. One of the benefits to employers that this system offers is helping them find ready skilled workers who meet their needs.

For further information, please contact the North Alabama Skills Center at 256.381.0611 (Shoals area) or 256.332.7672 (Russellville area).

**Ready-To-Work Program**

The Ready-To-Work Program is a grant-funded, workforce development training program sponsored by Northwest-Shoals Community College. The program is free to residents who live in the College’s service area and are ages sixteen years old and above. The Ready-To-Work Program is operated by the Alabama Department of Postsecondary Education through the Governor’s Office of Workforce Development in cooperation with Alabama’s Industrial Development Training (AIDT). The training curriculum is set to standards cited by business and industry employers throughout the state as well as skills cited in the U.S. Department of Labor’s Secretary’s Commission on Achieving Necessary Skills (SCANS) Reports.

Upon successful completion of the program, students receive two workforce development credentials: the Career Readiness Certificate (WorkKeys certification) signed by the Governor of Alabama and the Alabama Certified Worker Certificate (ACW) signed by Alabama’s Industrial Development Training (AIDT) director. The Ready-To-Work credentials help employers show a person’s abilities and measures the skills that employers seek. The mission of the program is to assist citizens in Alabama to find employment, find better employment and/or to receive needed additional training. The certifications that are earned improve the marketability and employment opportunities for program graduates.

For more information, please contact the Ready-To-Work Coordinator at 256.331.5248.

**Out-Of-School Youth Success Program**

The Out-of-School Youth Success Program assists and encourages eligible youth, ages 16-21, in developing an educational and career plan, which may include the achievement of their GED, and/or postsecondary completion to achieve the goal of employment in their chosen field. Career Advisors are located in Colbert, Franklin, Lauderdale, Lawrence and Winston counties.

Program services include assistance with:

- Transition to Adult Education
- College enrollment
- Tutoring
- Personal Development workshops
- Job readiness skills
- Job placement

For more information, please call 256.331.5348.

The College administers this Workforce Investment Act grant through the Alabama Department of Economic and Community Affairs (ADECA).

**Educational Talent Search**

The Educational Talent Search Program is funded through the U.S. Department of Education, sponsored by the College with projects located on both campuses. The program is designed to assist eligible participants to enter, continue in and graduate from high school and to enroll in and complete a program of postsecondary education or training. The program works with students in grades 6 through 12 (ages 11 through 27) as well as dropouts and stop-outs in Colbert, Franklin, Lauderdale, Lawrence, and Winston Counties in Alabama and Lawrence and Wayne Counties in Tennessee. In this program, trained counselors/advisors seek out qualified individuals who need help. Through counseling and advising, they motivate participants to continue their education. Program participants receive academic advising, assistance in course selection, preparation for college entrance exams, assistance with college and student financial aid applications, connections to services to improve financial literacy, personal and career counseling and connections to high quality academic tutoring.

For more information, please contact:
- Tuscumbia Project Director at 256.331.5348
- Tennessee Valley Project Director at 256.331.5327
- Phil Campbell Project Director at 256.331.6238

**Upward Bound Program**

The Upward Bound Program is funded through the U.S. Department of Education and sponsored by the College, at both the Phil Campbell Campus and the Shoals Campus. The program serves high school students of Colbert, Franklin, Lauderdale, and Winston Counties.

The purpose of this program is to generate in its participants additional academic and motivational skills necessary for success in secondary and postsecondary education. Program participants are selected from area high schools based on criteria mandated by the U.S. Department of Education. The Upward Bound Program consists of an academic component and a summer component. The academic component focuses on cultural enrichment and supplemental support to assist the students in subject areas in which they may experience the most difficulty (tutoring sessions). The summer component consists of a six-week residential program...
which focuses on exposing program participants to college life, and obtaining some college credit.

For further information, please contact the Phil Campbell Campus at 256.331.6277 or the Shoals Campus at 256.331.5357.

Northwest-Shoals Broadcasting

NW-SCC Broadcasting (NWSB) was created to work with the College’s Distance Education program through the use of Comcast Cable Channel 192. The College provides educational and community programming 24-hours a day, seven days a week. NWSB programming is also available in the Russellvile area on Charter Channel 182. Cable subscribers are able to enroll in classes that meet the demands of today’s busy lifestyles. We are proud to serve our students and all of northwest Alabama with an alternative method of accessing the educational opportunities available at the College. NWSB has broadened its functions through the years to include filming and recording various student activities, college ceremonies, commercials for the College, and various community and statewide events. We would like to welcome you to take advantage of the wealth of knowledge that can be obtained from viewing NWSB. For additional information, please visit the College website at www.nwscc.edu or call 256.331.5277.

Library Services

Northwest-Shoals Community College has two library locations: the James A. Glasgow Library on the Phil Campbell Campus and the Larry W. McCoy Learning Resources Center on the Shoals Campus. Library services at the Phil Campbell and the Shoals Campuses support the various instructional programs and courses of the College with a total collection of over 64,000 books, several hundred periodicals, newspapers, and vertical file material. The libraries are members of the Library Management Network. Through this network, the holdings of the libraries are available via the Internet. Over 41,000 E-books, electronic versions of printed books, are accessible via the LMN website (www.lmn.lib.al.us). Internet access to the Alabama Virtual Library provides a variety of information through periodical indexes and resources. Library orientation is provided through individual or scheduled group sessions. The library is open 56 hours per week, except for holidays. The library phone numbers are 256.331.5283 (Shoals Campus) and 256.331.6271 (Phil Campbell Campus).

Library Regulations

Students registered for class at the College may use library materials on presentation of their student ID card. Materials generally circulate for a period of two weeks. Students with overdue materials must clear their obligations at the end of each term; otherwise, the student will not be permitted to register for further studies with the College.

Community citizens who wish to borrow materials may also be issued a library card by simply providing their full name, current address, and phone number. Only two books per person may be checked out at a time.

Alabama Technology Network

Muscle Shoals Center

The Alabama Technology Network of the Alabama College System links two-year colleges, the University of Alabama System, Auburn University and the Economic Development Partnership of Alabama to solve the needs of industry. Each ATN regional center tailors its services to meet local needs, providing innovative and cost-effective solutions to enable Alabama’s existing industry to be globally competitive. The network is Alabama’s affiliate of the National Institute of Standards and Technology’s Manufacturing Extension Partnership, which provides hands-on assistance and training to smaller manufacturers. The Alabama Technology Network is committed to meeting customer requirements and increasing customer satisfaction through the quality management system. After initially receiving ISO 9001:2000 certification, ATN then transitioned to the ISO 9001:2008 Quality Management System standard. ATN-Muscle Shoals center specializes in environmental, health and safety training and technical assistance. For more information, please contact 256.331.5422 or visit http://www.atn.org

Shoals Campus

Child Development Center

The College Child Development Center is an on-campus child care facility for pre-school children of Northwest-Shoals Community College students, faculty and staff, and for the community. The center is open from 7:00 a.m. until 5:00 p.m. and will operate on the same calendar schedule as the College contingent on adequate enrollment. A parent or guardian must register a child before he/she will be allowed to stay in the care of the center staff. The Shoals Center serves children 2 to 5 years old who are potty trained. To register a child, please obtain a form at the Shoals Campus Child Development Center at 256.331.5245. (N.A.E.Y.C. Accredited Site)

Discounts:

Children of Northwest-Shoals Community College students, faculty and staff are eligible for a discounted tuition rate. Childcare Management Agency (CMA) assistance is accepted as well as scholarships that are available. For more information on these scholarships, contact the Shoals Campus Child Development Center at 256.331.5245.

Pre-Kindergarten Program

A state supported pre-K program for 18 children who are four years old is available on the Shoals Campus. A minimal sliding fee for program services is assessed and may be charged. Hours of operation for this program are 7:45 a.m. until 2:15 p.m. Before and after school care are also available for pre-K students. For more information, call the Shoals Campus Child Development Center at 256.331.5245.
Summer School-Age Child Care
On campus school-age care is offered in the Child Development Center during the summer term for children and serves preschool ages that are potty trained from 2 1/2 years old to age 6. This service will be available from 7:00 a.m. until 5:00 p.m., Monday through Friday for children of students, faculty, staff, and community contingent upon adequate enrollment. Pre-registration is required. For more information and fee rates, contact the Shoals Campus Child Development Center at 256.331.5245.

“Kids In College”
Offered through the College’s Child Development Program, the “Kids in College” summer education program provides a unique learning opportunity for children who are home or visiting in the summer. “Kids in College” is specially designed for children entering grades K-6. The camp brings children onto the Shoals Campus and into the classroom for lots of fun while learning. Children participate in age-grouped classes that provide hands-on, non-graded academic, creative, physical, and wellness activities. For information and dates contact the Child Development Center at 256.331.5245.
**Student Development Services**

**Purpose Statement**

Student Development Services is a support system to help students in meeting their academic objectives, and at the same time to broaden the student’s perspective outside the structured classroom experience. The following functions serve the student body and complement classroom instruction: Admissions, Career Planning/Counseling, Career Services, Adult Education/GED Testing, Registration, Services for Special Student Populations, Student Activities, Intramurals, Student Financial Aid, and Recruitment.

Student Development Services works with students toward their total development—physical, emotional, moral, social, as well as mental—by providing nonacademic experiences and services which aid in total student development and student success. By providing these services, Student Development Services supports the College’s mission of providing lifelong educational opportunities, economic growth and a higher quality of life for its students.

In summary, the objectives of Student Development Services support instructional objectives in the following manner:

1. Helping students achieve the highest possible potential beyond a secondary-school level.
2. Emphasizing freedom of choice and decision-making.
3. Emphasizing academic or occupational-vocational work which prepares the student for successful entry into a senior college or university and/or entry into a vocation from which the student may earn a livelihood and gain satisfaction.
4. Stressing the total cooperation between the different facets of education from which the student may be the beneficiary.
5. Assisting occupational-technical students in self-evaluation to determine the most suitable programs to fit their interest and aptitudes.
6. Developing student leadership skills and providing opportunities for student participation in the College’s planning and decision-making.
7. Establishing a recruitment program that targets diverse groups.
8. Establishing programs that serve minority groups, at-risk students, women and students with disabilities.

**Visitors Policy**

The College welcomes all individuals or groups visiting the campus. Guides will be provided upon request. Check with the receptionist or call the admission offices for a friendly and informed guided tour. The College requires that all visitors register with Campus Police.

**Inclement Weather Procedures**

When inclement weather or other conditions indicate that the College needs to close, Closing information is posted on the College’s website, College’s social media sites and sent to local radio and television stations before 6:30 a.m. for day classes and before 4:00 p.m. for evening classes.

**Patriot Alert - Northwest-Shoals’ Emergency Notification System**

Northwest-Shoals Community College utilizes “Patriot Alert,” the new emergency alert and notification system. Patriot Alert delivers messages in the event of an emergency to students, faculty members, and staff. This will be the best source for timely information and instructions on what to do in the event of any campus emergency (college closing, delay in opening, etc.).

Students no longer need to rely on the media, calls to the college or friends, or coming to the campus to learn about the adverse impact on campus operations due to severe weather, power outages, criminal activity, threats, or other emergency situations. Signing up for Patriot Alert will ensure that this information is automatically delivered to the email addresses and phone numbers (by voice and/or text message) that students provide within moments of any such alerts being sent by the college. Patriot Alert provides this important information directly from authorized members of the college’s administration and security personnel. The Patriot Alert is the official source of the most accurate and current information.

Please follow the simple steps below to log-in to your private Patriot Alert “Dashboard” and enter your contact information. Please be assured that all contact information provided will be kept confidential, safe, and secure, and will never be used for any purpose beyond the authorization given by the student. The student information is for the official use of Northwest-Shoals Community College’s emergency alert system only and is never shared with any third parties.

To log-in and access the NW-SCC SchoolCast Dashboard account, go to the following secure web-site: [https://www.myschoolcast.com/go/nws](https://www.myschoolcast.com/go/nws)

**Identification Cards**

New students must have a photo taken for the Higher One ID Card upon registration. ID Cards may be required for use of the library and other campus activities. The following regulations apply to the ID Card System:

1. Students are to carry their cards at all times. When requested by College officials for proper identification, students are to present their cards. Failure to present ID Cards may result in disciplinary action or arrest for trespassing. Student ID Cards are made for personal use only. Students violating the ID Card privileges are subject to probation, suspension, or dismissal.
2. Loss or theft of cards should be reported to the Student Success Center, Shoals Campus; Cashier’s Office, Phil Campbell Campus; or Higher One.
3. Replacement ID Cards cost $20.00 each.
4. Temporary ID cards are $5.00 and valid for 30 days.
Vehicle Registration/Parking Decals

All motor vehicles operated regularly on the campus by students and College personnel must be registered with the College. All operators of automobiles on the campus are subject to the following parking and traffic regulations. (Revisions will be posted.) The College reserves the right to regulate the use of vehicles on both campuses and withdraw the privilege of operating an automobile on both campuses for failure to abide by the regulations or for other good cause.

1. All motor vehicles, including motorcycles, operated on campus by students must be registered once each academic year. Cost of decal is $8.00 a semester and is included in the NW-SCC fees during registration of classes.
2. Students will be issued a decal which must be displayed on vehicle.
3. When the owner trades motor vehicles, the currently used motor vehicle should be registered. Replacement decals can be obtained in the Student Activities office.
4. The person in whose name a vehicle is registered, regardless of who is driving, is responsible for all traffic and parking citations on campus.
5. Any student not enrolled in credit classes who will be on campus on a regular basis will be required to purchase a decal from the Student Activities Office.
6. State law - mandatory insurance

Parking Violations

1. Unauthorized parking in areas designated as:
   a. Faculty/Staff Parking
   b. Handicap Parking
   c. Yellow Curb
   d. Fire Lane
   e. No Parking Zone
   f. Reserved Parking
   g. Visitors Parking
2. Blocking drive or walkway
3. No decal
4. Parking on grass
5. Any area designated by the College

Other Violations

1. Speeding
2. Running stop sign
3. Littering
4. Loud music
5. Tobacco use/Smoking
6. Firearm/Weapons

Penalties

Violators may be ticketed by Campus Police. Unpaid tickets will result in additional penalties to the students. Grades will be withheld and the student will not be allowed to register until all fines are paid. The school reserves the right to tow violators. A list of fines is available on the College Website. These are subject to change.

The College has implemented a color code system for parking as listed below:

Red  -  Faculty/Staff
Green -  Visitor
White -  Students
Blue  -  Handicap
Yellow -  No Parking

Crime Reporting and Timely Warnings

In the event of a criminal act, notify Campus Police:

Shoals Campus  256.627.1526
Phil Campbell Campus  256.412.4731

It is the responsibility of the College to investigate an incident or criminal act that occurs on campus and to take proper action. The College will notify and cooperate with other law enforcement agencies when appropriate.

Numerous and diligent efforts are made to advise members of the campus community of crime-related problems. It is the duty of the college to inform students of threatening situations, in a timely fashion. The campus police, the office of the Chief Fiscal Officer and public relations will release information which can be used by students and other college community members to reduce their chances of becoming victims. This information will be released via the Patriot Alert and flyers will be posted at visible locations throughout the College.

Student Resources

College Bookstore

Hours of Operation (subject to change)

Shoals Campus - Building 100
Monday-Thursday  7:30 a.m.-5:30 p.m.
Friday  7:30 a.m.-11:30 a.m.
www.nwscshop.com

Phil Campbell Campus - Building 304
Monday-Thursday  7:30 a.m.-4:30 p.m.
Friday  7:30 a.m.-11:30 a.m.
www.nwsc-pcshop.com

Methods of Payment

The Bookstore accepts cash, check, gift cards, MasterCard, Visa, Discover, American Express, and PayPal.

- Checks will be accepted for the amount of purchase only.
- Third Party checks will not be accepted.
- Student ID or driver’s license is required when writing a check.
- Checks should be made payable to NW-SCC Bookstore.
- Refunds will be credited in the same form as payment method. Example: Purchase made with credit card will be returned to credit card.
- Refunds for purchases paid by check are subject to a 15 day waiting period from time of purchase.
- Financial Aid credits will be returned to student account or Higher One card.
Textbook/Course Material Refund Policy
Textbooks and course materials in resalable condition may be refunded with a receipt within seven (7) calendar days from the start of classes or within two (2) days of purchase thereafter, including summer terms. Textbooks and course materials purchased during the last week of classes or during exam week are not eligible for return. Defective books should be returned immediately for a replacement. A receipt is required for exchanging defective books.

General Merchandise Refund Policy
Non-textbook items may be refunded or exchanged within 30 days of the sale with the original receipt, providing the merchandise is in resalable condition. Items must contain all original packaging and accessories. Defective merchandise must be returned immediately with a receipt for a replacement. Computer software, CDs and DVDs may be returned providing they are unopened and shrink-wrapped.

Financial Aid Students (Pell, WIA, TRA, Scholarships, etc.)
- Charges will be accepted for a limited time each semester. Exact dates for charges will be posted in the Bookstore.
- Picture ID (student ID or Driver’s License) is required for all financial aid charges.
- Students are responsible for knowing what books or merchandise can be charged to their particular type of financial aid program.
- Gift items and clothing cannot be charged to any type of financial aid.

Rental and digital options are available on many textbooks and more are being added every semester. See bookstore staff for details.

Book Buyback
The Bookstore buys books back every day. The buyback amount is determined by several factors including but not limited to the use of the book for the next semester and the condition of the book. Buyback amounts cannot be determined over the phone. See bookstore staff for details.

Bookstore Tips
- Always keep your receipt.
- Notice signs posted in and around the Bookstore to stay informed about key information.
- Shop early if possible for a better selection of used books.
- Always bring your Student ID.
- Bring your class schedule with you to ensure that you purchase the correct books.
- Books are labeled with tags that include class information. Just match the course number to your schedule.
- If you purchase the wrong book you may return it provided you follow the refund policy.
- When a book is listed as optional you may want to go to class before purchasing it.

Counseling Services
The College provides counseling services that:

- Assist students with development of meaningful educational plans that are compatible with their identified goals;
- Assist students through a system of testing in acquiring appropriate career goals;
- Assist students in making career choices by providing information and assessments regarding various careers;
- Provide services to aid students in their transition and success with their college experience;
- And assist students in dealing with obstacles that interfere with their educational, occupational, social, and personal goals.

Career Centers are located on both the Shoals and Phil Campbell Campuses. Various materials are available for the student's personal use, such as Computerized Interest Inventories and Career Explorations Programs, college catalogs, and Occupational Guidance Literature.

Career Services
Career Services provides assistance to students in locating and securing employment upon graduation, as well as part-time employment while they are pursuing their degree or certificate.

Career Services includes assistance with career interest inventories, resume preparation, employment applications and the development of interview skills.

Employers contact Career Services to hire currently enrolled students as well as graduates. Career Services personnel:

- Post job vacancies;
- Make job applications accessible to students upon employers’ request;
- Send resume to employers;
- Assist employers with scheduling interviews.

Each semester, Career Services conducts a “Job Seeking Skills” workshop. Topics include resume writing, job search information, employability skills, and interviewing skills.

Students must be currently enrolled or Northwest-Shoals graduates and must complete a registration form and have a current resume on file to be eligible to register with Career Services. The Career Services staff is available by appointment for individual assistance.

Students are encouraged to keep their files current.

Contact:
Phil Campbell Campus 256.331.6297
Shoals Campus 256.331.5375

Cooperative Education
Cooperative (Co-op) Education is a program which allows students to gain work experience associated with their fields of study. This plan integrates classroom study with employment and is based on the principle that learning does not confine itself to academic achievement but is equally dependent upon practical experience. Students are placed in industrial, business, educational and governmental positions where they have the opportunity for real-world
work experiences.

In addition to work experience gained by the student, the co-op program has a distinct advantage for participating companies. Employers are given the opportunity of having first chance at hiring some of the most knowledgeable and aggressive students which attend specific programs of study. Past experience has shown that these students are very loyal to companies that hire them providing them with an income as they continue their education. In addition, the students are usually hired on a part-time basis and do not incur the cost of hiring full-time employees.

There are two avenues for the student to select from as they enter the co-op education program. Both options have a one (1) credit hour limit per semester with a maximum of three (3) credit hours in two years. They also require employer involvement through employer appraisal sheets submitted at the end of each semester.

The co-op elective option requires a minimum of 20 clock hours per week in the co-op work environment.

The co-op substitution option allows the student to substitute real-world work experiences in their field of study for the required lab classes in their selected program. The student must attend the theory classes and is responsible for all the content material within the lab they are substituting.

For more information, contact the Vice President’s Office at 256.331.5217.

Learning Resources Center
Regulations

Charging Books and Other LRC Materials

1. A book may be checked out for two weeks on an automated circulation system used by the LRC. A book may be renewed when returned by the student provided that no other students need it. However, one may not renew an overdue book without first paying the fine. No more than 7 books can be checked out by one patron.

2. Reserve books are located at the circulation desk. Books on room reserve circulate only in the LRC. Special arrangements must be made with the librarian on duty for permission to keep books longer than the specified periods.

3. Books should be returned to the circulation desk of the LRC during service hours. Materials may be deposited in the book return located outside the LRC during non-College hours.

Lost Books

1. If a book is lost while it is charged out in a student’s name, the student must pay the replacement value of the book. If a book is no longer in print, the replacement value will not exceed a charge of $25.00. A receipt for payment will be issued by the business office.

2. If the book is found and returned to the LRC, the student’s money will be requested for refund from the Business Office upon presentation of the receipt and clearance from the LRC; the student then is liable for the full overdue charge on the book.

Fines

1. A book or materials in regular circulation carries a fine of $.10 for each class day it is overdue.

2. Reserve books carry a fine of $.25 per day overdue.

3. Fines should be paid and all LRC obligations cleared before a student will be permitted to charge out a book or materials. Fines must be paid and all LRC obligations cleared at the end of each term; otherwise, the student will not be permitted to register for further studies with the College.

4. No fine will exceed the original value of the book.

5. Overdue lists are on file and students are notified each term of overdue books.

Student Rights and Responsibilities

Students have the right to use all the materials held by the LRC, but students have the responsibility to try to use them in such a way that other students may use them also. The following Bill of Rights adequately sums up student rights and duties:

1. Every student has the right to use all the facilities of the library; likewise, he/she has the responsibility to leave the facilities in the same condition for other students in which they were made available to him/her.

2. Every student has the right to study undisturbed; likewise, each student has the responsibility to see that he/she does not infringe on the rights of other students to study undisturbed.

3. Every student has the right to borrow circulating library materials; likewise, he/she has the responsibility to extend the same courtesy to other students, library personnel, and guests to the library.

In keeping with college philosophy, the LRC extends circulation privileges to the people of the surrounding areas. The LRC’s hours are posted in the buildings and reviewed in library orientations.

Student Success Center

The Student Success Center offers seminars and workshops in conjunction with the Student Success course to address issues related to the affective needs of students including but not limited to time and money management, test and study skills, navigating through NW-SCC, and college transfer. Additionally, Student Success Coaches serve as one-on-one mentors for new, transitional, probationary, and faculty-identified students. Coaches communicate with students bi-weekly to serve as academic coaches, accountability partners, and significant connections to the College for identified students.

The Student Success Center provides:

- New student mentoring
- Student Success Workshops (ex. Financial aid,
Student Support Services

The Student Support Services program provides opportunities for academic development, assists students with basic college requirements, and serves to motivate students toward the successful completion of their postsecondary education. Student Support Services (SSS) also provides grant aid to current SSS participants who are receiving Federal Pell Grants. The goal of SSS is to increase the college retention, transfer, and graduation rates of its participants and help students make the transition from one level of higher education to the next.

To qualify for services, students must be a U.S. citizen, first generation (neither parent graduated from a four-year college), of limited income, or have a documented disability in the NW-SCC ADA office. Specific services include but are not limited to tutoring and study skills enhancements, career planning and interest inventories, assistance with transfer and campus visits, academic advising and priority registration for continuing participants, financial aid planning and scholarship searches, and consideration for direct financial assistance. Application for the program may be made on line or in the offices located on both campuses. Additional information may be obtained by calling 256.331.5319 on the Shoals Campus or 256-331-6276 on the Phil Campbell Campus.

Workforce Development Center

Testing

The Testing/Advising Center is located on the Shoals Campus in the Workforce Development Center (Building 127) and offers general information, testing, advising and early registration for new students. The center assists the Instructional Division of the College in integrating students into an ongoing advising process with faculty to ensure the successful completion of their programs of study.

The College provides various types of testing services which support counseling, educational programs and Workforce Development. Testing services include many national testing programs such as the ACT, SAT, COMPASS, CLEP, GED and WorkKeys.

ACT - The American College Test Programs are administered on all regularly scheduled national testing dates. Persons desiring more information should contact Student Services.

COMPASS - All new students who have not completed college-level English or mathematics courses must take a placement test before registering for classes. The COMPASS test is administered by computer. The results from the placement test help students and their advisors work together to identify skills, strengths, and knowledge in order to succeed in English and mathematics. The COMPASS also helps the College use the results to guide students toward classes that strengthen their current knowledge and skills to ensure educational success. There is an $8.00 charge to re-test. For more information see page 26.

CLEP - The College Level Examination Program is a national system of credit by examination. The College is an open test center. More specific information on this test may be found in this catalog under the topic “Credit From Non-Traditional Sources.”

GED - The General Educational Development Test is the standard test of high school equivalency. It is administered weekly at the Shoals campus, one day a month at the Phil Campbell campus. Persons desiring to take the GED must be at least 18 years old, may not be enrolled in regular or secondary day school, and must meet Alabama residency requirements. Applicants 16 years of age may take the GED, but they must present special documentation. A $5.00 fee is required for duplicate copies of test scores. Contact the Testing/Advising Center for details.

WORKKEYS - WorkKeys assessments are administered as requested by business and industry and local school systems. The services of the Workforce Development Center staff are available to all students enrolled at the College. Students are encouraged to make wise use of these services.

Contact Information:
Muscle Shoals Campus – 256-331-5282
Phil Campbell Campus – 256-331-6297

Advising

The Advising Center is located on the Shoals Campus in the Workforce Development Center (Building 127) and offers general information, advising, and early registration for new students. The Center assists the Instructional Division of the College in integrating students into an ongoing advising process with faculty to ensure the successful completion of their programs of study. For more information, contact the Coordinator for the Advising Center at 256-331-5297

Additional Information

The Workforce Development Center offers additional workforce training for citizens of the Northwest Alabama community. For more information on the college’s “Ready to Work” program or to prepare for the “Career Ready Alabama” certificate, call 256.331.5299 or 256.331.5221.

Student Life

The Student Life program at the College is designed to provide opportunities for students to participate in individual and group-directed educational experiences that are meaningful and enriching to their lives. This program consists of student activities, clubs/organizations and intramurals on the Phil Campbell and Shoals Campuses.

Student Activities

Institutional Policy

It is the policy at the College that all student activities and organizations are non-discriminatory in terms of membership and are in full compliance with all requirements imposed
by Title VI, Title IX, and the Rehabilitation Act of 1973 as amended.

All extracurricular activities are under the direct control of the College through the Assistant Dean. The Assistant Dean must approve policies and procedures for control and operation of all clubs, organizations and activities sponsored by the institution. Each campus has a Coordinator of Student Activities to assist the Assistant Dean with coordination. The Assistant Dean reports to the Vice President.

The Student Activities program offers events for students to participate in each semester which may include: campus cookouts, SGA elections, Mr. & Ms. Northwest-Shoals elections, Halloween contests, National Collegiate Alcohol Awareness Week, Community College Month and Spring Fling - based on student interest.

Organizations and Clubs

Phil Campbell Campus

The following clubs/organizations are available:

**Ambassadors** - The Northwest-Shoals Ambassadors are students who help to promote school spirit, assist in receiving guests at official functions, go to area high schools for recruiting purposes, act as hosts to welcome visitors of the administration and faculty, take high school seniors and other interested persons on tours of the campus, and serve at other college and community events. Selection is based on an interview, academic achievement, personality, community involvement and extracurricular activities.

**Circle K** - is the world’s premier collegiate organization with a membership of more than 11,000 members on more than 525 campuses around the globe. Circle K is comprised of college students who are responsible citizens and leaders with a lifelong commitment to community service worldwide. The students embrace the youth of the area, helping them become better students and citizens.

**College Bowl Team** - engages in intercollegiate academic competition with institutions in the Alabama College system: This group is recruited from high school scholars bowl teams and enrolled in Interdisciplinary Studies (IDS) classes on both campuses.

**National Student Nurses’ Association** - The Associate Degree Nursing Program offers students the opportunity to join the National Student Nurses’ Association (NSNA). The mission of NSNA includes development of leadership skills and promotion of high standards of nursing care including accountability and client advocacy. Membership is voluntary and includes annual dues.

**Nursing Club** - provides opportunity for fellowship, academic, and personal development to its members. Nursing is promoted by class and community involvement.

**Phi Theta Kappa** - Alpha Zeta Iota Chapter is an international honor society that has as its objective the promotion of scholarship and fellowship among students with superior achievement. Students are selected for membership in Phi Theta Kappa based on the completion of 12 semester hours and a cumulative GPA of 3.5 or higher.

**Revive College Ministry** - The Northwest-Shoals Revive College Ministry is organized to reach others for Christ. To provide a time of Christ-centered fellowship, to study His Word, and to learn how to follow Jesus in everyday life. Revive is open to all.

**Science Club** - Northwest-Shoals Society for Technology and Science (The Science Club) is organized to promote the academic welfare of students interested in science, medicine, pharmacy, engineering and other technical areas. Members participate during the year in a variety of academic, social, and community service activities such as National Chemistry Week, the Science With Santa Show, National Technology Week, picnics, field trips, meetings featuring outside speakers, and science demonstrations in public school classrooms.

**Student Government Association (SGA)** - represents student views to the college administration and coordinates the student activities program. The SGA serves as an umbrella for all other clubs/organizations on campus. Students must meet qualification requirements to seek positions on the SGA. Positions available each year include President, Vice-President, Secretary/Treasurer and Senators.

The sponsors and student leaders from the campus-based clubs/organizations make up the Student Leadership Councils. These councils are chaired by the Coordinators of Student Activities and meet with the President each year to discuss student and College activities planned and student concerns.

Students have an important role in the College’s decision-making process. The Student Leadership Councils serve as advisory groups to channel communication to the College President and other college administrators. Student leaders are appointed as voting members of various standing committees by the College President.

Shoals Campus

The following clubs/organizations are available:

**Ambassadors** - The Northwest-Shoals Ambassadors are students who help promote school spirit, assist in receiving guests at official functions, go to area high schools for recruiting purposes, act as hosts to welcome visitors of the administration and faculty, take high school seniors and other interested persons on tours of the campus, and serve at other College and community events. Selection is based on an interview, academic achievement, personality, community involvement and extracurricular activities.

**Art Club** - seeks to be an active part of the rich local art community and enhance the cultural awareness of its members.

**ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc.)** - brings students together who are pursuing a career in the field of heating, ventilating, refrigeration and engineering.

**Baptist Campus Ministry (BCM)** - provides the opportunity for Christian growth, fellowship, and service. The BCM is sponsored by the Alabama Baptist State Convention and the Colbert-Lauderdale Baptist Association. BCM is open to all students.

**Circle K** - is the world’s premier collegiate organization with a membership of more than 11,000 members on more than 525 campuses around the globe. Circle K is comprised of college students who are responsible citizens and leaders.
with a lifelong commitment to community service worldwide. The students embrace the youth of the area, helping them become better students and citizens.

**College Bowl Team** - engages in intercollegiate academic competition with institutions in the Alabama College system: This group is recruited from high school scholars bowl teams and enrolled in Interdisciplinary Studies (IDS) classes on both campuses.

**International Society of Certified Electronics Technicians (ISAT)**

**Student Chapter** - ISAT is a prestigious and globally recognized organization promoting excellence in a variety of electronics technology fields through like-minded fellowship and higher educational standards. Membership grants access to members-only, extra-curricular materials to prepare for unique certification opportunities providing students with an advantageous edge when seeking careers within these fields. Membership is open to all current students.

**NW-SCC Fishing Club** - competes in various collegiate fishing tournaments throughout north Alabama.

**Patriots for Christ** - Seeks to be a shining light for Northwest-Shoals Community College and to provide a spiritual support system to all searching for a closer relationship with God and the truth about His Word.

**Phi Theta Kappa** - Alpha Sigma Beta Chapter is a national honor society that has as its objective the promotion of scholarship and fellowship among students with superior achievement. Students are selected for membership in Phi Theta Kappa based on the completion of 12 semester hours and a cumulative GPA of 3.5 or higher.

**Science Club** - Northwest-Shoals’ Society for Technology and Science (The Science Club) is organized to promote the academic welfare of students interested in science, medicine, pharmacy, engineering and other technical areas. Members participate during the year in a variety of academic, social, and community service activities such as National Chemistry Week, the Science With Santa Show, National Technology Week, picnics, field trips, meetings featuring outside speakers, and science demonstrations in public school classrooms.

**Skills USA** - is a national organization for students enrolled in technical, skilled, and service occupations. It provides quality education, experiences for students in leadership, teamwork, citizenship and character development.

**Student Government Association (SGA)** - represents student views to the college administration and coordinates the student activities program. The SGA serves as an umbrella for all other clubs/organizations on campus. Students must meet qualification requirements to seek positions on the SGA. Positions available each year include President, Vice-President, Secretary/Treasurer and Senators.

The sponsors and student leaders from the campus-based clubs/organizations make up the Student Leadership Councils. These councils are chaired by the Coordinators of Student Activities and meet with the President each year to discuss student and College activities planned and student concerns. Students have an important role in the College’s decision-making process. The Student Leadership Councils serve as advisory groups to channel communication to the College President and other college administrators. Student leaders are appointed as voting members of various standing committees by the College President.

**Fund Raising**

All fund raising activities conducted by student clubs and organizations must be approved by the President.

**Intramurals**

The Intramural Program on each campus provides opportunities for students to participate in a variety of recreational sports and table games. This program enhances student enjoyment, fitness, and personal skills. Events are held throughout the year including: pool, basketball, ping pong, softball, tennis, flag football, and table games. Staff are designated on each campus to survey student interests, plan activities and implement the programs under the supervision of the Coordinators of Student Activities.

**Campus Facilities**

**Food and Snacks**

Vending machines with assorted snacks and drinks are available on the Shoals Campus in Buildings 100, 110, 112, 115, 118, 121 and 122. Problems with vending machines should be reported to the Cashier’s Office. On the Phil Campbell Campus, vending machines are located in the Student Center, Occupational Building, and the Fine Arts Center, and the cafeteria is located in the student center. Problems should be reported to the Cashier.

**Check Cashing Policy**

- Students will be referred to the ATM for cash.
- Student checks will be honored for the amount of purchase only.
- No two-party checks will be cashed, except NW-SCC checks of $25.00 or less.
- Check cashing privileges will be denied after two returned checks.

**College Email**

Northwest-Shoals Community College supplies all students with an NW-SCC email account. Communication from the College will be transmitted through this account. To activate, students should visit the www.nwsc.edu and follow directions posted on the homepage.

**Personal Mail**

The mailroom does not accept incoming or outgoing personal mail. All personal packages or mail delivered to NW-SCC will be returned to the sender.

**Health Services**

Medical facilities are not provided on campus for College students. Medical treatment for students and faculty is not to be obtained from the PN instructors, RN instructors or students except when they set up a time and place to check blood
pressure or in the case of an emergency. Health services are limited to first aid and the response of advanced life support units from the local hospitals. The College assumes no responsibility for medical treatment to its students. Any accident or injury requiring more than basic first aid treatment is referred to one of the local hospitals or to the student’s private physician. The expense of hospitalization or medical treatment will be borne by the student.

For the Shoals Campus, the emergency phone number for the Helen Keller Ambulance Service is 256.386-4601. This service will transport to Helen Keller, Medical Center Shoals, or ECM Hospital. Limited first aid supplies are located in the Admissions Office on both campuses and in each of the Occupational Program Offices on the Shoals Campus. For the Phil Campbell Campus, the emergency phone number for the Phil Campbell Rescue Squad is 205.993.4242 or 911.

Student Insurance Benefits

ELIGIBILITY
All eligible students of Northwest-Shoals Community College are covered for the activities while under the care and direction of the school with the exception of Dual Enrollment/Dual Credit.

POLICY EFFECTIVE DATE
The Policy is effective from August 18, 2014 to August 18, 2015.

MEDICAL EXPENSE BENEFITS
If the Insured Student incurs eligible expenses as the result of a covered injury, directly and independently of all other causes, the Company will pay the charges incurred for such expense within 52 weeks, beginning on the date of accident. Payment will be made for eligible expenses not to exceed $10,000. The first such expense must be incurred within 60 days after the date of the accident. "Eligible Expense" means charges for the following necessary treatment and service, not to exceed the usual and customary charges in the area where provided, including:

1) Medical and surgical care by a physician;
2) Radiology (X-rays);
3) Prescription drugs and medicines;
4) Dental treatment of sound natural teeth;
5) Hospital care and service in semi-private accommodations, or as an outpatient;
6) Ambulance service from the scene of the accident to the nearest hospital;
7) Orthopedic appliances necessary to promote healing.

CLAIM PROCEDURE
In the event of an accident, the student should:

1) Report immediately to the nearest doctor or hospital.
2) A completed claim form is required for each accident in order to process the claim. Secure a claim form from the cashier’s office or online at www.studentplanscenter.com. Complete and sign the claim form, attach all medical and hospital bills and mail to the Plan Underwriter below.

For a detailed brochure on the NW-SCC Student Insurance

Policy, please contact the NW-SCC Cashiers' Office at 256.331.5226 (Shoals Campus) or 256.331.6382 (Phil Campbell Campus).

NW-SCC Policies

Campus Security Policies

A. Reporting Criminal Actions or Other Emergencies

1. It is the policy of the College that any criminal act; act or threat of violence; injury; destruction of college or personal property; traffic accident; or other situation which occurs on any campus of, or any other site operated by, the College, and which may constitute an emergency, a danger to the health, safety, or property of any person, or a threat to the public order be reported to Campus Police at 256.627.1526, Shoals Campus or 256.412.4731, Phil Campbell Campus. If this is unsuccessful, the situation should be reported the Chief Fiscal Officer in Building 100.

2. All witnesses to any situation which fits into any of the above-described categories shall make themselves available to make written statements and otherwise assist college officials and law enforcement officers in the investigation of the situation. It shall be an offense subject to appropriate disciplinary action for any College employee or student to file false report of, knowingly make a false statement about, or interfere with the investigation of, any situation of the nature described in paragraph A.1. above.

3. It shall be the duty of the College, upon its designated official or officials being made aware of any situation of a nature described in Paragraph A.1. above, to immediately take all reasonable action to prevent or minimize any harm or threat of harm to the employees, students, and visitors of the College. Furthermore, it shall be the duty of said official(s) to notify the appropriate law enforcement agency in the event of an act of a criminal nature, or of any other nature (for example, a traffic accident) which would ordinarily involve law enforcement officials. Additionally, it shall be the duty of said official(s) to contact the appropriate fire department, emergency medical agency, or other authority or agency which is due to be notified of the respective incident.

4. Firearms/weapons of any kind are prohibited on all properties of NW-SCC. Violation of this policy will result in being trespassed from the campus and may result in arrest.

B. Security of Campus Facilities

The College has a security system for monitoring buildings.

Crime Statistics

As required by Public Law 101-542, statistics will be made available concerning such crimes as murders, rapes, robberies, aggravated assaults, burglaries, and motor vehicle thefts occurring at any College site.
In compliance with the Clery Act, the following are statistics relating to incidents occurring on the campuses of Northwest-Shoals Community College for the academic years September 1, 2011-August 31, 2013:

<table>
<thead>
<tr>
<th>Crime Classification</th>
<th>Shoals Campus 2011</th>
<th>Shoals Campus 2012</th>
<th>Shoals Campus 2013</th>
<th>PC Campus 2011</th>
<th>PC Campus 2012</th>
<th>PC Campus 2013</th>
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<tr>
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</tr>
<tr>
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<td>0</td>
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</tr>
<tr>
<td>Aggravated Assault</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
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<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Drug Abuse Violations</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Please direct any questions or concerns regarding the College’s security policy to the Director of Safety and Security. Shoals Campus, telephone 256-331-5415. For Campus Crime Statistics see the internet at www.nwscce.edu/parking.

NW-SCC Clean Air Policy

Northwest-Shoals Community College (NW-SCC) is committed to providing a safe and healthy environment for its employees, students and visitors. The College recognizes the right of persons to make their own decisions about their personal use of tobacco products away from the College. However, in light of findings of the U.S. Surgeon General that exposure to secondhand tobacco smoke and use of tobacco products are significant health hazards, it is the intent of the College to establish a smoke-free environment on its campuses and in its college-owned vehicles. Consequently, the use of tobacco smoking products, including the carrying of any lighted smoking instrument, in College buildings or upon other College premises or inside College-owned, rented or leased vehicles, is prohibited. For the purposes of this policy, a “tobacco product” is defined to include any lighted cigarette (including electronic cigarettes), cigar, pipe, bidi, clove cigarette, and any other smoking product. All College employees, students, visitors and contractors are required to comply with this policy, which shall remain in force at all times. Any College employee or student found to be in violation of the clean air policy will be subject to a monetary fine. Tickets will be issued by campus police officer for violations. Monetary fines will be imposed as listed below, depending on whether the offender is an employee or student. Any visitor or contractor found to be violating this policy shall be asked to discontinue the disallowed activity, and any failure by a visitor or contractor to discontinue the disallowed activity after being requested to do so shall result in the visitor or contractor being escorted off the college premises by campus police. NW-SCC will continue to uphold the current policy that the use of ALL tobacco products is prohibited in all buildings on each campus. Failure to adhere may result in the below listed fines. Student Fines

Any NW-SCC student found to have violated this policy shall be subject to the following fines: 1st ticket - Warning, 2nd ticket - $25.00 fine. All fines must be paid within 7 days of ticketing. Fines that are not paid within the 7 days shall automatically double in amount. A student who has a pending fine or fines may not register for classes nor have transcripts released until all fines are paid in full. Any student wishing to appeal a fine arising from the finding of a tobacco-free violation under this policy may do so with the Assistant Dean, Tom Carter. Employee Fines

Any NW-SCC employee found to have violated this policy shall be subject to the following fines: 1st ticket – Warning, 2nd ticket - $25.00 fine. All fines must be paid within 7 days of ticketing. Fines that are not paid within the 7 days shall automatically double in amount. Any employee wishing to appeal a fine arising from the finding of a violation of this policy may do so with the Vice President, Dr. Glenda Colagross. With the exception of advertising in a newspaper, magazine, or similar publication that is not produced by NW-SCC, no tobacco-related advertising or sponsorship shall be permitted on college campuses or at college-sponsored events. No tobacco-related advertising or sponsorship shall appear in any publications produced by the College or by any club or association authorized by NW-SCC. For the purposes of this policy, the term “tobacco-related” applies to the use of a tobacco brand or corporate name, trademark, logo, symbol or motto, selling message, recognizable pattern of colors or any other indicia of product identification identical to or similar to, or identifiable with, those used for any brand of tobacco products or company which manufactures tobacco products.

Substance Abuse Prevention Policy

It is the College’s policy for all students and College personnel that the possession of, the distribution of, or the use of drugs and alcohol is prohibited. We are committed to providing a drug-free learning and working environment. We have included in our orientation credit course, which is required of all entering students, a section on drug awareness. The College has and shall maintain a drug-free awareness program as an in-service requirement (annually) to inform employees about:

A. the dangers of drug abuse in the workplace;
B. the College’s policy of maintaining a drug-free workplace;
C. any available drug counseling, rehabilitation, or employee assistance program; and
D. the penalties that may be imposed upon employees for drug abuse violations.

WARNING: As set out more fully in Section 5301 of the Anti-Drug Abuse Act of 1988, for anyone convicted of drug distribution or possession, the court may suspend eligibility for Title IV financial aid. Anyone convicted three or more times for drug distribution may become permanently ineligible to receive Title IV financial aid.

Philosophy

The College is concerned with both the welfare of the College community and with the academic and personal development of each student. The College strives to create a safe and healthy environment; one in which the high risk of alcohol and other drugs does not interfere with learning, performance and development. Substance abuse disrupts this environment and
places at risk the lives and well-being of the members of the College as well as the potential of students for contribution to society. It is important for all members of the College to take responsibility for preventing the illegal or high risk use of alcohol or other drugs from negatively affecting the College’s learning environment and the academic physical and emotional well-being of its students.

The College assumes that students are mature adults who have developed mature behavior patterns, positive attitudes, and conduct above reproach. Students must assume responsibility for their own actions.

The College recognizes that the use of drug and alcoholic beverages poses potential risk to the health and safety of members of the College and to the community at large. The College policies and procedures regarding standards of conduct and enforcement; legal sanctions regarding unlawful use, possession or distribution; federal, state, and local ordinances; health risks, and where to get assistance are offered here to serve as a guide in Northwest-Shoals’ Drug and Alcohol Prevention Policy.

I. Policy

It is the policy of the College that during the month of September of each academic year, information regarding the College’s drug and alcohol abuse prevention policy shall be distributed to each student and employee of the College.

Each year, the Coordinator of Student Success shall review its Drug and Alcohol Abuse Prevention Program and shall:

1. Determine the effectiveness of its program and report to the President any revisions needed by the program to make it more effective;
2. Ensure that the standards of conduct described in Part II hereof are fairly and consistently enforced; and
3. Submit a written report to the President stating the findings and recommendations of the Team.

The President shall implement such of the Team’s recommended revisions as he shall deem appropriate and reasonable.

II. Standards of Conduct and Enforcement

The College is a public educational institution of the State of Alabama and, as such, shall not permit on its premises, or at any activity which it sponsors, the possession, use, or distribution of any alcoholic beverage or any illicit drug by any student, employee, or visitor. In the event of the confirmation of such prohibited possession, use, or distribution by a student or employee, the College shall, within the scope of applicable federal and state due process requirements, take such administrative or disciplinary action as is appropriate. For a student, the disciplinary action may include, but shall not be limited to, probation, suspension or expulsion. For an employee, such administrative action may include, but shall not be limited to, reprimand, suspension, or termination of employment, or requirement that the employee participate in and/or successfully complete an appropriate rehabilitation program. Any visitor engaging in any act prohibited by this policy shall be called upon to immediately cease such behavior and/or leave the premises, be trespassed by Campus Safety or arrested.

If any employee, student, or visitor shall engage in any behavior prohibited by this policy which is also a violation of federal, state, or local law or ordinance, that employee, student, or visitor shall be subject to referral to law enforcement officials for arrest and prosecution.

III. Where to get Assistance

Help is available for persons who are in need of counseling or other treatment for substance abuse. Following are several agencies and organizations which can assist those in need of such services.

A. On-Campus Assistance

On-campus assistance is available at the College for students and employees of the College through the Division of Student Services on both the Phil Campbell and Shoals Campuses. The Campus Assistance Program offers initial assessment and counseling services, information on substance abuse, and assistance in obtaining off-campus community services. Services provided on-campus are free of charge to the student and/or employee. Costs for off-campus services are the responsibility of the recipient. Confidentiality is maintained in accordance with state and federal laws.

B. National Toll-Free Hotlines

1.800.622.2255
National Council on Alcoholism

C. Local Agencies and Referral Numbers

Northwest Alabama Mental Health Center
1100 7th Avenue
Jasper, Alabama 35501
205.337.0541

Satellites

Northwest Alabama Mental Health
71 Carraway Drive
Haleyville, Alabama 35565
205.486.4111

Northwest Alabama Mental Health
409 1st Street S.E.
Hamilton, Alabama 35570
205.921.2186

Bradford Health Services
1.800.879.7272

Riverbend Mental Health
P.O. Box 941
Florence, Alabama 35631
256.764.3431

Sunrise Lodge
1163 Washington Avenue S.W.
Russellville, Alabama 35653
256.332.0078

Policy on Freedom of Expression

The College respects the right to freedom of expression for individuals or groups within the College community. The College, however, does have an obligation to protect its facilities. For this
reason it is the general policy of Northwest-Shoals Community College that no person, company, or other organization will distribute literature, post signs, sell merchandise, or promote religious, commercial, or political activities on the campus of this institution without first obtaining permission from the Assistant Dean.

**Circulating Petitions**

Any Individual desiring to promote petitions of a political, religious, commercial, or other issue-oriented nature will be restricted to a designated area. Petitioning is restricted to one-day with a renewal option on a one-day basis.

**Commercial, Political, Promotional, and Religious Activities**

College facilities and off-campus sites for College activities may be used for commercial solicitation, advertising, political, promotional, and religious activities only when such activities are sponsored and requested by a college employee or an officially recognized student organization. These activities may not interfere with or operate to the detriment of the conduct of college affairs.

All political organizations or persons representing such will be provided space in a designated area. Political activity will be restricted to one-day with a renewal option on a one-day basis.

**Distribution of Literature**

Distribution of literature is limited to a specific area. A copy of literature to be distributed must be filed with the office of the Assistant Dean at least two days prior to distribution. All literature must bear the name of the sponsoring organization and/or person. Anonymous literature may not be distributed on campus. Distribution of literature will be limited to one-day and may be renewed on a one-day basis.

**Guest Speakers**

For the purposes of this handbook, guest speakers are persons invited to Northwest-Shoals Community College by a registered student organization or for the purpose of addressing a college audience. The President of the College has the authority to cancel any speaking engagement when the appearance is deemed to constitute a clear and present danger to the orderly operation of the institution. The College has set up the following procedure for guest speakers.

Registered student organizations must obtain the approval in writing of the club advisor and the Assistant Dean when sponsoring a guest speaker. The organization must obtain and submit the required approval form to the Assistant Dean before submitting an invitation to the speaker. Responsibility for the selection of appropriate speakers rests with the student organization. When questions of appropriateness are involved, the club advisor and the student organization should confer with the Assistant Dean.

No publicity concerning speakers may be released before approval of a guest speaker has been given by the Assistant Dean and the event has been scheduled on the college calendar. Room arrangements for meeting with speakers must be made in the Office of the President. In keeping with the traditions of the community college, guest speakers should, if at all possible, allow a reasonable opportunity to receive and answer questions from the audience.

The speaker alone is responsible for the views presented in his or her address. Invitation to speakers to speak on campus does not necessarily imply the approval of the expressed views by the sponsoring group, the College, or any official of the College.

**News Releases and Off-Campus Publicity**

News releases and off-campus publicity regarding upcoming events on campus must be submitted to the Public Relations Office at least three weeks prior to the date of the event.

**Poster Registration and Television Monitor Ads**

Only student organizations chartered by the College or groups authorized by the College administration may advertise through posters and literature.

An exception will be student elections, for which candidates may advertise one week prior to election day. This gives the candidate an opportunity to campaign and present their platform to the student body.

Posters or literature may be placed on campus at locations approved by the Assistant Dean.

Signs, posters, or literature are prohibited from:
- Restrooms
- Glass panels, windows, doors and ceilings
- Library buildings
- Any surface that could be damaged by tape or tacks

No leaflets or pamphlets should be distributed on campus without the approval of the Assistant Dean.

Under no circumstances may materials be distributed on windshields of vehicles.

All posters that relate to students must be approved by the Assistant Dean. All posters that are to be displayed must bear a stamp indicating approval. Unregistered posters, signs, announcements, etc. are subject to removal. The recommended poster size is 14" x 22"; however, larger posters will be allowed if permission is granted. Appearance of all posters, signs, etc. will be expected to exemplify the members' interest in an organization and the function which they are advertising. Lettering will be expected to be clear and uniform, permitting easy readability. The College reserves the right to refuse to register a poster, sign, etc. which is deemed inappropriate for public display.

Event posters should be displayed for a period not to exceed seven days before the event which they publicize. All posters should be removed by 1:00 p.m. the afternoon following the advertised event. In case of weekend functions, all posters should be removed by 1:00 p.m. the following Monday. Nonevent posters also have a seven-day limit.

**Use of College Equipment or Facilities**

Individuals are prohibited from unauthorized use of the College’s equipment or facilities. Equipment may include but is not limited to copiers, duplicating equipment, or public address systems. Authorization for such must be secured through the Assistant Dean.

**Policy on Intellectual Property Rights**

Based upon the State Board of Education policy 321.01: copyright, Trademark, and Patent Ownership, it is the policy of NW-SCC that in a situation where a student or college
employee develops an intellectual property, and such development arises in whole or in part from the use of college resources (including the work time of any college employee), the College shall have complete and exclusive ownership of all resulting copyrights and/or patents. However, it shall be the policy of NW-SCC that in such a situation, the employee/student who develops the textbook, workbook, technology, or other product shall be entitled to a designated share of any royalties or license fees received by the College from such a copyright or patent, provided that prior to the development of the respective product, there shall be a contract executed between NW-SCC and the employee by which the employee will be authorized to use the resources of NW-SCC in the product’s development. In particular, the contract shall specify:

A. The nature, scope, type, and number of NW-SCC resources which are anticipated to be used in the product’s development.

B. The proportionate share of royalties or fees which the employee/student shall be eligible to receive and shall further specify the types of documentation to be provided to the College as to what College resources were used and what outside resources were used to develop the product.

C. That the portion of any royalties or fees to be received by the employee/student must have a direct relationship to the verifiable amount of the employee/student's personal time, resources, and/or funds which are to be used in the product’s development, as compared to the verifiable amount of all time, resources, and funds to be devoted to the development of the product.

D. That any compensation to the employee/student arising from the development of the product must be made from proceeds derived directly from the publication, manufacture, sale, lease, or distribution of the products, and not from any State or Federal funds.

E. That the contract does not provide an exemption from, and does not imply compliance with, the Alabama Ethics Law, and that it shall be subject to the scrutiny of the Alabama Ethics Commission, which shall be provided with a copy of the contract.

F. That prior to the payment of any compensation to any college employee/student under a contract of the type described above, such contract or payment must be approved in writing by the appropriate dean level administrator.

All revenue derived from the creation and production of intellectual property by any NW-SCC employee/student, which is not designated as the employee/student share, shall be placed into the College's general fund to cover the cost of the College resources which were used in the development of the product.

Any NW-SCC employee/student who is interested in entering into an agreement with the College for the development of any intellectual property subject to this policy shall begin the process by submitting to the appropriate dean a written proposal which describes in detail the proposal, and which contains a list of all anticipated college resources needed for the development of the product as well as all resources to be provided by the employee or any other person or source other than the College.

### PC Network/Internet

#### Acceptable Usage Policy

**Introduction**

The College owns and operates a variety of computing systems which are provided for the use of College students, faculty, and staff in support of the programs of the College and are to be used for education, academic development, and public service only. Commercial uses are specifically excluded. All students, faculty and staff are responsible for seeing that these computing facilities are used in an effective, efficient, ethical, and lawful manner.

These regulations establish rules and prohibitions that define acceptable use of these systems. Unacceptable use is prohibited, and is grounds for loss of computing privileges, as well as discipline or legal sanctions under Federal, State, and local law.

**Statement of Policy**

**A. Audience and Agreement**

1. All users of the College computing systems must read, understand, and comply with the policies outlined in this document, as well as any additional guidelines established by the administrators (AS400 and PC Network) of each system. Such guidelines will be reviewed by the College and may become subject to approval as a college policy or procedure.

2. By using any of these systems, users agree that they will comply with these policies.

**B. Rights**

1. These computer systems, facilities, and accounts are owned and operated by the College. The College reserves all rights, including termination of service without notice, to the computing resources that it owns and operates. These procedures shall not be construed as a waiver of any rights of the College, nor shall they conflict with applicable acts of Law.

2. Users have rights that may be protected by federal, state, and local law.

**C. Privileges**

1. Access and privileges on College computing systems are assigned and managed by the appropriate system administrator. Eligible individuals may become authorized users of a system and be granted appropriate access and privileges by following the approval steps prescribed for that system.

2. Faculty/staff and students may use a lab at any time the facility is not in use. If the lab is in use the permission of the instructor should be obtained. A faculty/staff member or a student should not use a lab if the use monopolizes equipment or disrupts the scheduled use of the facility.

3. Faculty making assignments requiring students to use a computer (other than classes already scheduled) must make arrangements with the appropriate system administrator.

**D. Responsibilities**

1. Users are responsible for maintaining the following:
a) An environment in which access to all College computing resources are shared equitably among users:

b) The system administrator of each system sets minimum guidelines within which users must conduct their activities.

2. An environment conducive to learning:

a) A user, who uses the College’s computing systems to harass, or make defamatory remarks, shall bear full responsibility for his or her actions. Further, by using these systems, users agree that individuals who transmit such remarks shall bear sole responsibility for their actions. Users agree that the College’s role in managing this system is only as an information carrier, and that they will never consider transmission through this system as an endorsement of said transmission by the College.

b) Many of the College computing systems provide access to outside networks both public and private which furnish electronic mail, information services, bulletin boards, conferences, etc. Users are advised that they may encounter material that may be considered offensive or objectionable in nature or content. Users are further advised that the College does not assume responsibility for the contents of any of these outside networks.

c) The user agrees to comply with the acceptable use guidelines for whichever outside networks or services they may access through College systems.

d) Further, the user agrees to follow proper etiquette on outside networks. Documents regarding etiquette are available through system administrators and through specific individual networks.

e) The user agrees never to attempt to transmit, or cause to be transmitted, any message in which the origination is deliberately misleading.

f) The user agrees that, in the unlikely event that someone does transmit, or cause to be transmitted, a message that is inconsistent with an environment conducive to learning or with a misleading origination, the person who performed the transmission will be solely accountable for the message, not the College, which is acting solely as the information carrier.

3. An environment free of illegal or malicious acts:

a) The user agrees never to use a system to perform an illegal or malicious act. Any attempt to increase the level of access to which (s)he is authorized, or any attempt to deprive other authorized users of resources or access to any College computer system shall be regarded as malicious, and may be treated as an illegal act.

3. An environment free of illegal or malicious acts:

a) The user agrees never to use a system to perform an illegal or malicious act. Any attempt to increase the level of access to which (s)he is authorized, or any attempt to deprive other authorized users of resources or access to any College computer system shall be regarded as malicious, and may be treated as an illegal act.

b) Users are responsible for backup of their own data.

E. Accounts

1. All accounts allowing access to the College computer resources must approve by the appropriate system administrator including the issuing of passwords.

2. In the event an individual is no longer employed by the College it is the responsibility of the employee’s supervisor to notify the appropriate system administrator to close the former employee’s account.

3. Users may not, under any circumstances, transfer or confer these privileges to other individuals. Others shall not use any account assigned to an individual without written permission from the system’s administrator. The authorized user is responsible for the proper use of the system, including any password protection.

F. Confidentiality

The College reserves the right to access all information stored on College computers without notice. File owners will be notified of file access and/or maintenance, in advance, if such notice is practical. When performing maintenance, every effort is made to insure the privacy of a user’s files. However, if policy violations are discovered, they will be reported immediately to the appropriate systems administrator.

G. System Usage

Electronic communications facilities (such as e-mail) are for College related activities only. Fraudulent, harassing or obscene messages and/or materials are not to be sent or stored.

H. System Performance

No one should deliberately attempt to degrade the performance of a computer system or to deprive authorized personnel of resources or access to any College computer system.

I. Unauthorized Access

Loopholes in computer security systems or knowledge of a special password should not be used to damage the computer system, obtain extra resources, take resources from another user, gain access to systems or use systems for which proper authorization has not been given.

J. Copyright

Computer software protected by copyright is not to be copied from, into, or by using campus computing facilities, except as permitted by law or by the contract with the owner of the copyright.

College networks and equipment may not be used to violate copyright laws. The unauthorized reproduction of copyrighted materials, including illegal downloading or sharing of copy righted music, movies, books, etc., is a serious violation of NWSCC’s Network Usage Policy as well as U.S. Copyright Laws.

K. Violations

Appropriate disciplinary action will be taken against individuals
found to have engaged in prohibited use of the College AS400 or PC network/internet resources. The following sanctions could be imposed for a violation of any of the policies and procedures stated herein.

1. Immediate loss of access.
2. Additional disciplinary action to be determined by the college in line with existing policies.
3. Legal action, when applicable.

L. Additional Guidelines

System administrators will establish more detailed guidelines, as needed, for specific computer systems and networks. These guidelines will cover such issues as allowable connect time and disk space, handling of unretrievable mail, responsibility for account approval and other items related to administering the system.

Violence Against Women’s Act Policy

Northwest-Shoals Community College follows the regulations of the Violence Against Women Reauthorization Act (“VAWA”) under the Campus Sexual Violence Act (“SaVE Act”) provision, Section 304.

Under VAWA, Northwest-Shoals Community College requires:

- Reporting of domestic violence, dating violence, and stalking, beyond crime categories the Clery Act already mandates;
- Adopting certain student discipline procedures, such as for notifying victims of their rights; and
- Addressing and preventing campus sexual violence.

VAWA’s SaVE Act requires annual reporting of statistics for various criminal offenses, including forcible and non-forcible sex offenses and aggravated assault. VAWA’s SaVE Act provision adds domestic violence, dating violence, and stalking to the categories that, if the incident was reported to a campus security authority or local police agency, must be reported under Clery.

Parsed for clarity, these offenses are defined:

1. “Domestic violence” includes asserted violent misdemeanor and felony offenses committed by the victim’s current or former spouse, current or former co-habitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.
2. “Dating violence” means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.
3. “Stalking” means a course of conduct directed at a specific person that would cause a reasonable person to fear for her, his, or others’ safety, or to suffer substantial emotional distress.

In addition, prevention training is provided for students in the College’s Student Success class as well as mid-day seminars throughout the semester.

Sexual Harassment

Definition: Sexual harassment is a violation of Title IX of the 1972 Education Act. Sexual harassment consists of any unwelcome verbal or physical conduct of a sexual nature where submission to such conduct is an explicit or implicit term or condition of employment. Sexual harassment is defined as any behavior of a sexual nature that denies, limits or adversely affects the emotional well being or academic progress of any student enrolled at this institution. In addition, any unwelcome sexual conduct that unreasonably interferes with an individual’s performance or creates an intimidating, hostile or offensive working environment can constitute sexual harassment even if it leads to no tangible or economic job consequences. This may include the viewing of sexually offensive web sites on the internet while on College property or in a College sponsored program.

Sexual harassment under any of the above definitions is a violation of school policy at the College and will not be ignored, tolerated, or condoned. The College administration will take all necessary steps to insure that sexual harassment, in either the hostile environment or “quid pro quo” forms, does not occur on campus or at any event/activity sponsored by this College. This policy applies to all members of the College community. Students of the College community are encouraged to promptly report complaints about sexual harassment to the Title IX Coordinator.

Sexual Assault

It is the policy of the College that no student or employee may threaten the health and safety of a member of the College community, of any person on College property, or at a College sponsored or supervised activity, through the commission of sexual assault, including acquaintance/date rape.

Definition: The College recognizes and adopts the definition of rape as defined in the Alabama Criminal Code. Additionally, the College acknowledges acquaintance rape in its definition of sexual assault. Acquaintance rape is defined as forced, manipulated or coerced sexual intercourse by a friend or an acquaintance. It is an act of violence, aggression and power in which a victim under protest is forced to have sex through verbal coercion, threats, physical restraints, and/or physical violence.

Consideration and rights to be afforded to all campuses community members who are victims of sexual assault:

a. The right to have all sexual assaults against them treated with seriousness, and the right, as victim, to be treated with dignity;

b. The right to have sexual assaults committed against them investigated and adjudicated by the duly constituted criminal and civil authorities of the governmental entity in which the crimes occurred, and the right to the full and prompt cooperation and assistance of campus personnel notifying the proper authorities;

c. The right to be free from pressure that would suggest that the victim: (i) not report crimes committed against them to civil and criminal authorities or to campus law enforcement and disciplinary officials; or (ii) report crimes as lesser offenses than the victim perceives them to be;

d. The right to be free from suggestions that sexual
assault victims not report, or under-report, crimes because:

1. Victims are somehow “responsible” for the commission of crimes against them,
2. Victims were contributively negligent or assumed the risk of being assaulted; or
3. By reporting crimes they would incur unwanted personal publicity.

e. The right to the full and prompt cooperation from campus personnel in responding to the incident; and
f. The right to access counseling services established by the College.

Consideration and additional rights to be afforded to campus community members who are victims of sexual assault which occur on college property. After campus sexual assaults have been reported, the victims of such crimes shall have:

a. The right to require that campus personnel take the necessary steps or actions reasonably feasible to prevent unwanted contact or proximity with alleged assailants;

b. The right to be informed of the disciplinary proceedings as well as the outcome of such proceedings; and

c. The same right to assistance, or ability to have others present, which is afforded to the accused during any campus disciplinary proceedings.

Disciplinary Action: In addition to any criminal or civil actions which may be pending or in process, the College reserves the right to pursue separate disciplinary action. Persons found responsible for sexual assault may expect disciplinary actions up to and including dismissal from the College. Policies and procedures contained in the Student Code of Conduct will be followed in all disciplinary procedures.

The College provides programs to promote awareness of rape, including acquaintance/date rape. Guest speakers such as doctors, law enforcement officers, and crime victim’s assistance are invited to campus to speak to students in both small and large group settings. Mandatory residence hall meetings and videos are used to increase awareness.

**Responding to Sexual Assault Cases**

1. Immediate Response: College personnel are willing and able to assist victims of sexual assault. The Assistant Dean and the Chief of Campus Safety should be contacted immediately.

2. Delayed Reports: Victims often delay disclosing information to others about their sexual assault. When a delayed report occurs and the victim is a student, he/she may be referred to the Counseling Center for personal counseling and assistance in reporting the assault to the proper authorities.

3. The Assistant Dean will ensure that the consideration and rights to be afforded victims of sexual assault, as detailed in the College Sexual Assault Policy, are met. An effort will be made to have two College officials respond to the victim as soon as possible. This will allow one person to provide support and counsel, while the other person contacts appropriate individuals or agencies as needed.

4. All victims of sexual assault will be assisted in contacting appropriate legal authorities or service agencies (see below). Depending on the nature of the situation (i.e., physical and mental condition of the victim, immediacy of incident) and with the input of the victim, one or more of the following entities will be contacted as soon as possible but prior to the College officials leaving the assault victim:

   a. Rape Response Inc. - Phone 256.767.1100

   b. Police Departments
     - Campus Police Main Office - 256.627.1526
     - Muscle Shoals - 256.383.6746
     - Tuscumbia - 256.383.3121
     - Phil Campbell - 205.993.5313
     - Colbert County Sheriff - 256.383.0741 or 256.386.8550
     - Franklin County Sheriff - 256.332.8811

   The responding police officer will investigate the incident, collect any evidence and refer the victim to the appropriate services. An immediate police notification is important so that if the victim wishes to press criminal charges, the evidence at the scene may be preserved.

   c. Hospitals
     - Medical Center Shoals - 256.386.1600
     - Helen Keller Memorial Hospital - 256.386.4196
     - Russellville Hospital - 256.332.1611

5. The Assistant Dean or designee will determine:

   a. Additional actions which may be taken to assist the victim in dealing with the aftermath of the incident. For example, contacting faculty members to ask for extensions to complete work assignments and serving as a resource for continued support;

   b. The need to notify additional College personnel (i.e., administrators, Public Relations, etc.);

   c. Procedure for further investigation of the incident and possible disciplinary action.

**Sexual Assault Response Team Members**

**Campus Safety**
- Director of Campus Safety - 256.627.1526
- Office of the President - 256.331.6211
- Phil Campbell - 256.331.5215
- Shoals

- Crystal Ingle - 256.331.5249

**Counseling Services**
- Ken Brackins - PC Campus - 256.331.6242
- Kim Tucker - Shoals Campus - 256.331.8060

**Restroom Policy**

Restrooms and locker rooms are designated separately for women or men unless otherwise posted. Any individual using the other biological gender’s restroom or locker room shall be subject to discipline. If unisex or separate facilities are available, they may be offered as an alternative for the transgender individual.
Services for Persons with Disabilities

The College has the following physical facilities for disabled students:

1. All parking lots have designated parking areas equipped with wheelchair ramps and guard rails.
2. Restrooms are equipped with holding rails and stalls large enough to accommodate wheelchairs.
3. All buildings have elevated entrances to accommodate wheelchairs.
4. Drinking fountains and lavatories are designed to accommodate wheelchair persons.
5. The residence hall facility has rooms designated to accommodate the physically challenged.

All programs and facilities are available for qualified disabled applicants. Career guidance is available to assist disabled applicants in selecting a program in which they can be reasonably sure of success. Counselors and academic advisors will assist applicants in selecting an appropriate program of study. If needed, appropriate accommodations are available for disabled students through the ADA office.

Students who believe that special instructional accommodations should be made for them due to a disability should obtain an Accommodations Request Form from the ADA Coordinator, 256.331.5262. Information regarding special accommodations is also included in each course syllabus. It is the student’s responsibility to request accommodations. Documentation of need for accommodation may be required. The College will make every effort to provide reasonable accommodations. Contact the ADA Coordinator for more information, 256.331.5262 or 256.331.6261

Criteria for Disability Documentation

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the technical and academic standards at Alabama Community College institutions are entitled to reasonable accommodations. Under these laws, a disability is defined as any physical or mental impairment which substantially limits a major life activity, a history of such an impairment, or the perception of such an impairment. Alabama Community College System institutions do NOT provide disability documentation for students. It is the student’s responsibility to request accommodations and to provide appropriate documentation to the College office responsible for handling the request. Appropriate documentation is defined as that which meets the following criteria:

Health Condition, Mobility, Hearing, Speech or Visual Impairment

A letter or report from treating physician, orthopedic specialist, audiologist, speech pathologist, ophthalmologist, or other specialist as appropriate, to include the following:

1. clearly stated diagnosis;
2. defined levels of functioning and any limitations;
3. current treatment and medication; and

Psychological Disorder

A letter or report from a mental health professional (psychologist, neuropsychologist, licensed professional counselor), to include the following:

1. clearly stated diagnosis (DSM-IV criteria),
2. defined levels of functioning and any limitations;
3. supporting documentation (i.e. test data, history, observations, etc.);
4. current treatment and medication; and
5. current letter/report, dated and signed.

Traumatic Brain Injury (TBI)

A comprehensive evaluation report by a rehabilitation counselor, speech-language pathologist, orthopedic specialist, and/or neuropsychologist (or other specialist as appropriate), including:

1. assessment of cognitive abilities, including processing speed and memory;
2. analysis of educational achievement skills and limitations (reading comprehension, written language, spelling, and mathematical abilities);
3. defined levels of functioning and limitations in all affected areas (communication, vision, hearing, mobility, psychological, seizures, etc.);
4. current treatment and medication; and
5. current letter/report, post-rehabilitation, dated and signed.

Learning Disabilities

A comprehensive evaluation report from a clinical psychologist, psychiatrist, neuropsychologist, school psychologist, learning disability specialist, or diagnostician, including:

1. clear statement of presenting problem; diagnostic interview;
2. educational history of documenting the impact of the learning disability;
3. alternative explanations and diagnoses are dismissed;
4. relevant test data with standard scores are provided to support conclusions, including at least: (a) WAIS-R; (b) Woodcock-Johnson Psycho-educational Battery-Revised, including Written Language; (c) Woodcock-Johnson Cognitive Processing Battery to substantiate any processing problems;
5. clearly stated diagnosis of a learning disability based on DSM-IV criteria;
6. defined levels of functioning and any limitations, supported by evaluation data; and
7. current report, dated and signed.

Note: High School IEP, 504 Plan, and/or a letter from a physician or other professional will not be sufficient to document a learning disability.

Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD)

A comprehensive evaluation report from a physician, psychiatrist, clinical psychologist, neurologist, or neuropsychologist, including:

1. clear statement of presenting problem; diagnostic interview;
2. evidence of early and current impairment in at least two different environments (comprehensive history);
3. alternative explanations and diagnoses are ruled out.
4. relevant test data with standard scores are provided to support conclusions, including at least: (a) WAISR; (b) Woodcock-Johnson Psycho-educational Battery-Revised.
including Written Language; (c) Behavioral Assessment Instruments for ADD/ADHD formed on adults;
5. clearly stated diagnosis of ADD or ADHD based on DSM-IV criteria;
6. defined levels of functioning and any limitations, support by evaluation data; and
7. current report, dated and signed.
Note: High School IEP, 504 Plan, and/or letter from a physician or other professional will not be sufficient to document ADD or ADHD. Medication cannot be used to imply diagnosis.

Providing Services for Students with Disabilities

Services and reasonable accommodations are provided pursuant to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The Alabama Community College System is committed to working with individuals with disabilities. It is a goal of the Alabama Community College System to ensure that students with disabilities have the programmatic and architectural accesses needed for integration into campus life. All applicants must meet the academic and technical standards requisite to admission or participation in programs and/or activities at Alabama Community College System institutions. Alabama Community College System institutions will not reduce standards in the grading and/or evaluation of students. Academic requirements that are determined by Northwest-Shoals Community College to be essential or fundamental will not be modified.

Alabama Community College System institutions strive to eliminate barriers to learning or participation in other institutional activities, and provide the following services for students and faculty:

- screening of disability documentation;
- determination of appropriate accommodations;
- communication with faculty and/or staff regarding student needs; and
- referral to other available campus and/or community resources.

Providing reasonable accommodations for students with disabilities requires an individual assessment of need and is a problem solving process. Specific accommodations depend upon the nature and requirements of a particular course or activity and the skills and functional abilities of a particular student. Appropriate accommodations may include:

- extended time on exams;
- permission to tape lectures;
- change in test format;
- priority registration;
- enlarged print/graphics;
- textbooks on tape;
- handouts of overhead materials;
- removal of structural barriers;
- class note taker;
- use of spell check;
- extra time for assignments; or
- alternative evaluation methods.

Students with disabilities are responsible for informing the College about the disability and the need for reasonable accommodation. This should be done prior to or upon enrollment at the College. Students must furnish adequate documentation of their disabilities from medical or other appropriate professionals in order to substantiate the need for services.

Contact Information
Crystal Ingle
Assistant Dean of Student Success
256.331.5249

Student Rights, Responsibilities and Campus Standards

Student Conduct

The College assumes that entering students are mature adults who have developed mature behavior patterns, positive attitudes, and conduct above reproach. Students are treated in accordance with this behavior. The College reserves the right to dismiss any student whose on or off-campus behavior is considered undesirable or harmful to the College.

For the protection and convenience of all students and the community, regulations prohibit misconduct on the campus and in the classroom. Students participating in any unauthorized mass demonstration, or whose presence and/or actions constitute or abet a general disturbance, or who fail promptly to obey any order to disperse given by any College official are subject to immediate suspension from the College. A reasonably quiet environment shall be maintained at all times in and around College buildings.

Students conducting themselves in such a manner as to disturb or disrupt a class will be told by the instructor to leave the classroom. The student may return to class as soon as he/she is capable of conducting himself/herself as a mature adult. However, the second such offense would require the student to meet with the Assistant Dean and could result in charges being brought against the student. Charges against a student must be resolved by a formal due process hearing.

Code of Student Conduct

The publication of this Code of Student Conduct documents the standard of conduct by which students and organizations are expected to abide. Students and organizations shall be aware of the College Code and knowledgeable of the fact that they will be held accountable for compliance with its provisions. By enrollment at and affiliation with the College, a student or organization neither relinquishes the right nor escapes responsibilities of local, state, or federal laws and regulations. The College is committed to maintaining an environment that contributes to its educational mission as well as the safety, health, and well-being of all students and other persons on campus. Therefore, students and organizations are obligated to abide by the rules and policies established by the College.

It is assumed that students enrolling in the College are mature and have a desire for constructive learning and are attending with that purpose in mind. Common courtesy and cooperation are expected of all students. Interference, injury, or the intentional attempt to injure or interfere with the personal or property rights of any person—whether a student, visitor, faculty or staff member—or the College itself, is strictly prohibited.

Where there has been a serious violation of College regulations and a student’s continued presence will materially threaten
the welfare of the College, the President’s designated representative, may immediately suspend the student. The student shall be entitled to a hearing according to the regular disciplinary procedures.

Application

The Code of Student Conduct applies to individual students as well as formal and informal groups either involved in College-related activities or functioning as official representative(s) of the institution. It is applicable to the behavior of students and organizations, both on and off the College campus, which is determined to be incompatible with the educational environment and mission of the College.

Misconduct

Academic Misconduct

The College seeks to promote an atmosphere conducive to learning. Academic misconduct undermines the purpose of education. Such behavior is a violation of the trust between the students and faculty that must exist for the College to cultivate intellectual growth. Academic misconduct and dishonesty is commonly defined as:

1. Any form of dishonesty, including cheating on an exercise, test, problem, or examination submitted by a student to meet course requirements. Cheating includes the use of unauthorized aids (such as crib sheets, written materials, drawings, lab reports, discarded computer programs, the aid of another instructor on a take-home test, etc.), copying from another student’s work, soliciting, giving and/or receiving unauthorized aid orally or in writing, or similar action contrary to the principles of academic honesty.

2. Plagiarism on an assigned paper, theme, report, or other material submitted to meet course requirements. Plagiarism is the act of stealing and using the ideas or writings (phrases or passages) from another and use them as one’s own, without indicating that source.

3. Use of texts or papers prepared by commercial or noncommercial agents and submitted as student’s own work.

4. Violation of any College honor code or confidentiality agreement.

It is recognized that most matters involving academic dishonesty should be handled by the faculty member meeting with the students involved who are in their classes. Consequently, sanctions are determined by the individual faculty member: “F” on an assignment or test, “F” in the course, a stipulation that an assignment or test be redone or retaken, and similar sanctions. A student dissatisfied with such a sanction may appeal through the existing appeal process. (See Grade Appeal Procedures)

General Misconduct

The College expects the conduct of each student and organization to be in conformity with standards of common decency and decorum, with recognition of and respect for personal and property rights of others and the educational mission of the College. A student or organization may be disciplined and is in violation of the Code of Student Conduct for the following:

1. The College reserves the right to dismiss any student whose on or off-campus behavior is considered undesirable or harmful to the College.

2. Any student that is a registered sex offender must register with the Chief of Campus Police before attending class.

3. Forgery, alteration, or misuse of College documents, records, or identification;

4. Issuance of worthless checks made payable to the College;

5. Failure to comply with the authority of College officials acting within the capacity and performance of their positions may be considered disorderly conduct;

6. Violation of written College rules, policies, and regulations; (i.e., use of bottled or canned drinks, food or tobacco products in classroom);

7. Obstruction or disruption of teaching, research, administration, disciplinary procedures, other college activities, or other activities on college premises being conducted by either college or non-college persons or groups; specifically, car radios, or similar equipment must be turned down so they cannot be heard outside of the vehicles (cite Tuscaloosa ordinance). Additionally, students may not have cell phones or beepers ringing in class;

8. Burglary, theft, destruction, damage, or misuse of college, public, or private property (the student or organization is responsible for any damage done to property);

9. Conduct in violation of federal or state statutes or local ordinances which threatens the health and/or safety of the college community or adversely affects the educational environment of the College.

10. Conviction of any misdemeanor or felony which adversely affects the educational environment of the College;

11. Obtaining college services by false pretenses including, but not limited to, misappropriation or conversion of college funds, supplies, equipment, labor, material, space, facilities, or services;

12. Hazing, i.e., any mental or physical requirement or obligation placed upon a person by a member of any organization, or by an individual, or by a group of individuals which could cause discomfort, pain, or injury, or which violates any legal statute or college rule, regulation, or policy. Hazing has been defined as, but not limited to, the striking, laying open hand upon, treating with violence, or offering to do bodily harm to a person with intent to punish or injure the individual, or other treatment of a tyrannical, abusive, shameful, insulting or humiliating nature. Hazing is an action taken or situation created to produce mental or physical discomfort, embarrassment, harassment, or ridicule. Hazing is also considered to include the creation of a situation which results in or might result in mental or physical discomfort, embarrassment, harassment or ridicule, including servitude often called “personal favors.” Activities of this nature shall be dealt with promptly and sternly;

13. Lewd, indecent/immodest, obscene or unduly offensive behavior or expression. This offense includes, but is not limited to the wearing of attire; the usage of verbal, written or symbolic expressions; or behavior which would tend
to be reasonably interpreted as insulting to one’s race, gender, religion, age, national origin or disability and/or is in the opinion of the administration of the College to the extent that it would tend to disrupt the educational process and infringe upon the rights of any other student or employee of the College.

NOTE: The College does not promote or condone the loading and/or display of pornographic, religious, sacrilegious, satanic, nor any other text or graphic that may be deemed offensive on its computer systems. Individuals loading such software, text, or graphics are subject to the disciplinary rules of the College.

14. WEAPONS POLICY - No person shall keep, use, possess, display, or carry any rifle, shotgun, handgun, knife, bow and arrow, or other lethal or dangerous weapons or devices capable of casting a projective by air, gas or explosion, or mechanical means on any property or in any building owned or operated by Northwest-Shoals Community College or in any vehicle on campus. Realistic facsimiles of weapons are also not allowed.

If an instructor approves such items to be demonstrated for class purposes only, the instructor and student must obtain permission from Campus Police.

Any such person seen with or using such weapons on campus will be subject to disciplinary and criminal charges.

Firearms are prohibited on campus or any other facility operated by the College. Exceptions to this policy are: Law enforcement officers legally authorized to carry such weapons who are officially enrolled in classes or are acting in the performance of their duties or an instructional program in which firearms are required equipment. If the off-duty officer is a student, he/she must notify campus police once a semester. A weapon is prohibited from any type of hearing for personal business.

15. Possession, sale, and/or consumption of alcoholic beverages or non-prescribed, controlled drugs on College property or at a student or College-sponsored function;

16. Being under the influence of alcoholic beverages or non-prescribed, controlled drugs on college property or at a student or college-sponsored function;

17. Unauthorized manufacture, sale, delivery, or possession of any drug or drug paraphernalia defined as illegal under local, state, or federal law;

18. Filing a false report or knowingly making a false statement about or interfering with the investigation of any situation described in this conduct code;

19. Physical or verbal abuse, threat of violence, intimidation, and physical or mental harassment;

20. Trespassing or unauthorized entry;

21. Entering false fire alarms, tampering with fire extinguisher, alarms, or other equipment;

22. Placement, establishment, or maintenance of any mobile, impermanent, or temporary living quarters on property of the College;

23. Any form of gambling;

24. Disruptive or disorderly conduct which interferes with the rights and opportunities of those who attend the College to utilize and enjoy educational facilities;

25. Any other activity or conduct not specifically stated herein which impairs or endangers any person, property, or the educational environment of the College.

Violations of any of the above will render a student subject to disciplinary action under the procedures which provide for adequate notice and a fair hearing, outlined in this catalog. Penalties for violations may include: reprimand; probation; loss of privileges; suspension; expulsion; and other penalties which may be set forth in college regulations published in this catalog.

Cellular Phones and Pagers

Cellular phones and pagers shall be turned off in classrooms and laboratories.

Misconduct Disciplinary Procedures

Any case involving violation of published policies and regulations in this bulletin will be brought to the immediate attention of the Assistant Dean, who will discuss the case with the student, attempting to arrive at a mutually satisfactory conclusion of the matter. If a satisfactory conclusion is not reached at this point, the student may appeal the case to the Disciplinary Committee.

The Disciplinary Committee, or a similarly functioning group, is authorized to hear the student appeal and may choose to modify, uphold, or reverse the written recommendations of the Assistant Dean in this case. It is important to note that in the chronology of events, the student receives a copy of these recommendations first in his or her initial meeting with the Assistant Dean. His or her decision to appeal will be based on disagreement with these recommendations. After appeal to the Disciplinary Committee, the Assistant Dean will ensure that the student is granted due process through the following steps:

1. written notice will be provided the student at least three calendar days in advance of the hearing date. Further, the student will be given a list of witnesses and a copy of their statements or complaints, along with other evidence and affidavits which the College intends to submit against the student;

2. the student is permitted to have counsel present at the hearing to advise him or her. Attorneys are present in advising capacity only.

3. the student is permitted to hear the evidence presented against him or her and will be permitted the opportunity to present his or her own case, his or her own version of the incident, and any exhibits, affidavits, or witnesses on his or her behalf;

4. a full and complete record of the hearing will be made. Unless otherwise specified, a videotaped record will be used; and

5. the Disciplinary Committee will provide a written decision to the student and the Assistant Dean.

6. if the student disagrees with the decision of the College Disciplinary Committee, he or she may appeal that decision to the College President. Each appeal must be submitted in writing. A copy of all written documents is
Archived on file in the Assistant Dean’s office.
Final local responsibility for discipline is vested in the President of the College. Any disciplinary probation or suspension will be recorded on the student’s permanent record.

The College seeks to guarantee that the fundamental principles of fair play are observed and to assure that no disciplinary action is taken on grounds which are not support by substantial evidence.

Conscious effort is made to assure that all of the College’s regulations are within the scope of the lawful missions of tax-supported higher education. It is recognized that it is not a lawful mission of the College to prohibit the exercise of a right guaranteed by the Constitution or a law of the United States. However, the President will take direct and appropriate action in any case involving the integrity of the College and the well-being of the students.

SANCTIONS

A student or organization deemed to be in violation of the Code of Student Conduct by the Assistant Dean is subject to one or more of the following sanctions:

- **Reprimand.** A written notice that continuation or repetition of improper conduct may be cause for further disciplinary action.

- **Restitution.** Compensation for damages to property limited to the actual cost of repair or replacement.

- **Probation.** This sanction is for a designated period of time which may include exclusion from privileges such as extracurricular activities and/or on-campus driving privileges. Additionally, if the student or organization is determined by any of the disciplinary procedures herein set out to be in subsequent violation of the Code of Student Conduct during the probationary period, the student or organization may be either suspended or expelled.

- **Suspension.** Separation from the College for a definite period of time. To qualify for readmission after suspension from the College, approval must be secured from the College Disciplinary Committee.

- **Expulsion.** An indefinite termination of student or organization status from the College. Under certain conditions, expulsion could mean permanent severance from the College. To qualify for readmission after expulsion, approval must be secured from the College Disciplinary Committee.

DISCIPLINARY COMMITTEE COMPOSITION AND RESPONSIBILITIES

1. The College Disciplinary Committee shall consist of three faculty members and staff as appropriate.

2. The College Disciplinary Committee shall be chaired by a member of the Student Development staff appointed by the President of the College.

3. A quorum will consist of three committee members. Business may not be conducted without a quorum.

4. All College Disciplinary Committee hearings shall be confidential and closed to all persons except the following:
   a. The student or organization;
   b. Counsel;
   c. Witnesses who shall:
      i. Give testimony singularly and in the absence of other witnesses;
      ii. Leave the committee meeting room immediately upon the completion of the testimony.

All hearings will be videotaped. The video record will become the property of the College and access to them will be determined by the Vice President. All hearing case files will be located and archived in the Assistant Dean office.

5. The decision reached by the Disciplinary Committee will be by a majority vote. The Chairperson will vote only in case of a tie vote.

6. Within five (5) working days after the decision has been reached by the committee, The Chairperson of the College Disciplinary Committee shall send a certified letter to the student or organization’s last known address to provide written notification of the committee’s decision.

7. Copies of decisions and recommendations from the College Disciplinary Committee shall be forwarded to the appropriate administrator.

PROCESS OF RIGHT OF APPEAL

1. The President of the College shall be the final authority in the appeal process.

2. The student may file a written request asking that the President of the College review the decision and recommendations of the Assistant Dean and/or the College Disciplinary Committee. The written request must be filed within five days (excluding Saturday, Sunday, and holidays) of the hearing.

Student Grievance/Complaint Procedures

Informal Student Complaint Process

Northwest-Shoals Community College has a variety of procedures for dealing with student-related issues, including grade appeals, student discipline, harassment complaints, and Student Grievance policies. The informal complaint provides students with a procedure for addressing complaints about faculty/staff treatment of students that are not covered by other procedures.

Whenever possible, complaints at Northwest-Shoals Community College are handled in an informal manner. Administrators, faculty, and staff maintain an “open-door” policy to discuss issues of concern for all students. Students are encouraged to first attempt to resolve complaints with the faculty or staff person. If unresolved, students should speak to the departmental chairperson or supervisor of the program. If no resolution is reached, the student should lodge his or her complaint with the Assistant Dean of Student Success.
Formal Student Complaint Process

If an informal conference regarding a complaint fails to reach the outcome requested by the student, the student may initiate the formal process by filing a written complaint with the Assistant Dean of Student Success. Complaints will be handled as expeditiously as possible. Complaints by students will be processed within at least five days of the written report. Intensive student complaints can take as long as 30 days to reach resolution. The student will be notified in writing should the response require a longer evaluation. The response will be made by the Department Head/Division Chair or the Assistant Dean of Student Success. The President of the College will make the final judgment.

The College supports the student’s right to file a formal complaint; therefore, assurances are given that no adverse action will be taken against the student. All student complaints and issues will be handled objectively.

Grievance Procedures Involving Discrimination, Sexual Harassment, and Rights of the Disabled

Introduction

Any student who has a grievance against any other student or member of the College faculty, staff, or administration concerning any form of discrimination (Title VI, Civil Rights Act of 1964), sexual harassment (Title IX of the Educational Amendments of 1972), violation of the rights of the disabled (Section 504 of the Rehabilitation Act of 1973) or the Americans with Disabilities Act of 1999 should first attempt to resolve the matter with the individual involved. If for some reason resolution of the grievance is not possible, the student should make his/her grievance known to the immediate supervisor of the individual against whom the student has a grievance, the Assistant Dean of Student Success or Senior Personnel Officer in order to seek informal resolution of the problem.

In the event that the grievance involving discrimination (Title VI), sexual harassment (Title IX), or violation of the rights of the disabled (Section 504) cannot be informally resolved, the formal procedures listed below should be followed. The following procedures attempt to protect the student’s rights to file a grievance involving discrimination (Title VI), sexual harassment (Title IX), or violation of the rights of the disabled (Section 504) against students or member of the College faculty, staff, or administration, yet providing the right of due process for the accused. Students and members of the College faculty, staff, or administration are guaranteed procedural due process and the right to review and defend any evidence related to the grievance.

In order to accommodate the resolution of such situations, Northwest-Shoals Community College offers the following grievance procedures as the appropriate course of action for settling disputes and resolving problems.

I. Initial Steps

Any student of Northwest-Shoals Community College who has a grievance against another student or a member of the Northwest-Shoals faculty, staff, or administration should first seek to resolve the issues with the individual involved. However, a student who believes herself or himself to be a victim of sexual harassment is not required to speak with the perpetrator before filing a formal complaint. If a resolution is not met, the student should make his/her grievance known to the individual’s immediate supervisor or to the Assistant Dean of Student Success to seek an informal resolution to the problem. If no resolution is met, the student may file a formal student complaint.

If the student requires a formal student complaint, a formal written report must be submitted to the Dean of Student Success. If the student’s complaint cannot be resolved in the manner described above, the unresolved complaint becomes an official grievance.

II. Interim Resolution

If the Assistant Dean of Student Success deems that an interim resolution should be enforced pending a final outcome, the Assistant will recommend such accommodations to the President or his/her designee. The President or designee will have the discretion to impose or not impose an interim resolution.

III. Formal Grievance Process

A student who submits a complaint to the Assistant Dean of Student Success or appropriate College personnel and is not satisfied with an informal resolution may file a formal grievance. Grievance charges made by a student must be submitted to the Assistant Dean in writing. The grievance must be signed and as detailed as possible. The grievance should contain the following elements:

1. Date the original complaint was reported;
2. Name of the person to whom the original complaint was reported;
3. Facts of the complaint;
4. Action taken, if any, by the receiving official to resolve the complaint.

The Assistant Dean will notify the student or a member of the College faculty, staff, or administration of the charge(s) against him/her within five working days of the filed grievance. The Assistant Dean may suspend the student being charged, or the President of the College or his/her designee may suspend with pay the faculty member, staff member, or administrator being charged until a hearing is held and a decision rendered, if charges so warrant.

The Assistant Dean may then schedule the time and location of the Grievance Committee session. The Assistant Dean will make all reasonable attempts to notify the student or member of the College faculty, staff, or administration of the charges against him/her and provide the time, date, and location of the Student Grievance Committee hearing. If the student or
member of the College personnel who is charged with the grievance so desires, he/she may request a Grievance Committee hearing after initially meeting with the Assistant Dean. If the Assistant Dean is unable to notify the student or College personnel of the charges and Grievance hearing after a reasonable attempt, then the student may be suspended. The President of the College or his/her designee may suspend with pay the faculty member, staff member, or administrator until a hearing is held and a decision rendered.

The College shall have 30 calendar days from the date of receipt by the Assistant Dean of Student Success of the grievance to conduct an investigation, hold a formal hearing, and submit a written report to the appropriate parties.

IV. Investigation Procedure

The Assistant Dean of Student Success or his/her designee will conduct a factual investigation of the grievance allegations. The Assistant Dean, after reviewing all of the evidence, will determine if substantial evidence exist to support the grievance. The report shall contain findings of the investigation were stated in the preliminary written report and submitted to the Grievant and to the party or parties against whom the complaint was made. The report will be made a part of the hearing record if a hearing is subsequently conducted. Parties will have the opportunity to submit a written report objecting to any of the factual findings. If the Assistant Dean finds the grievance is supported by substantial evidence, she/he will make recommendations to the hearing committee for the resolution of the grievance. Upon receipt of the Assistant Dean’s report, the Grievant has five working days to notify the Assistant Dean of a hearing request. The Assistant Dean, at his/her discretion, may choose to schedule a grievance hearing in the best interest of the College. In the event of no hearing, the Assistant Dean’s report will be deemed a final report and will be filed with the President.

V. Hearing Procedure

In the event that the Assistant Dean of Student Success schedules a hearing, the Vice President or designee will appoint a qualified five-member committee. The chairperson shall be the Assistant Dean or her designee. A quorum shall consist of four members and the chairperson. The hearing may not be conducted without a quorum. All Student Grievance Committee hearings shall be confidential and closed to all persons except the Grievant, party of whom the grievance is accused, counsels, and witnesses. Witnesses will give testimony and leave the committee meeting room immediately upon the completion of the testimony. All hearings will be taped and minutes recorded. Tapes, hearing minutes, and evidence will become the property of the College and access to them will be determined by the Vice President. All case files will be located and archived in the Office of the Assistant Dean of Student Success. The decision reached by the Student Grievance Committee shall be by a majority vote.

VI. Report of Findings

Within five (5) working days after the decision has been reached by the committee, the Chairperson of the Student Grievance Committee shall send a certified letter to the student or employee’s last known address to provide written notification of the committee’s decision. Decisions and recommendations will be forwarded to the Assistant Dean of Student Success for official confirmation and implementation. Decisions and recommendations issued by the Student Grievance Committee shall be implemented within the confines of the laws of the State of Alabama and of the laws of the United States of America. The report shall contain:

1. Date and place of the hearing;
2. The name of each member of the hearing committee;
3. A list of all witnesses for all parties of the grievance;
4. Findings of facts relevant to the grievance;
5. Conclusions of law, regulations, or policy relevant to the grievance;
6. Recommendation(s) arising from the grievance and the hearing thereon.

VII. Appeal Procedure

The President of the College shall be the appeal authority in upholding, rejecting, or modifying the decision and recommendations of the institutional Student Grievance Committee. The charged student or College personnel may file a written request with the Assistant Dean of Student Success requesting that the President of the College review the decision of the Student Grievance Committee. The written request must be filed within five working days of the hearing’s conclusion. The President of the College shall issue his/her opinion to accept, reject, or modify the decision of the Student Grievance Committee within five working days of the appeal. If the decision of the Student Grievance Committee does not satisfy the complainant and should the grievance allege discrimination (Title VI), sexual harassment (Title IX), or violation of the rights of the disabled (Section 504), the complainant may file a written grievance with the Alabama State Board of Education as defined in Section 616, p. 104-105, of the State Policy and Procedure Manual.
the regional office of the Office for Civil Rights of the U.S. Department of Education with 180 days of the act, and/or the Equal Employment Opportunity Commission within 180 days of the decision issued by the institution. The College complies with non-discriminatory regulations under Title VI and Title VII of the Civil Rights Act of 1964; Title IX Education Amendment of 1972; and Section 504 of the Rehabilitation Act of 1973; and the Americans with Disabilities Act (ADA) of 1990.

For Policy/Grievance Procedure, contact:
Crystal Ingle
Assistant Dean of Student Success
P.O. Box 2545
Muscle Shoals, AL 35662
256.331.5249
College Personnel
President's Executive Cabinet

Humphrey Lee ................................................. President
   Ed.D., University of Alabama
   M.A., University of Alabama
   B.S., University of Alabama

Glenda Colagross ............................................. Vice President
   Ed.D., University of Alabama
   M.A.Ed., University of North Alabama
   B.S., University of North Alabama

Paul Merrill ..................................................... Chief Fiscal Officer
   B.S., University of South Alabama
   A.A., Faulkner University
   C.P.A.

President's Extended Cabinet

Edwin Carter ....... Director of College and Career Readiness/
   Instructional Services Specialist
   Chairperson, Business Division
   B.S., Alabama A & M University

Tom Carter .......... Assistant Dean of Recruitment, Admissions
   and Financial Aid
   M.A., University of North Alabama
   B.S., Athens State College

Crystal Ingle ............... Assistant Dean of Student Success
   M.A., University of North Alabama
   B.S., University of North Alabama

Timmy James ....... Associate Dean of Instructional Programs
   Ph.D., University of Alabama
   M.B.A., University of North Alabama
   B.S., University of North Alabama

Janet Jones ..................... Comptroller
   B.S., University of North Alabama
   Certified Public Accountant

Rose Jones ...... Associate Dean of Workforce Development
   M.A., Auburn University
   B.S., Auburn University

John McIntosh ............ Associate Dean of Institutional
   Effectiveness, Distance Education and Development
   M.S., University of Southern Mississippi
   B.S., University of North Alabama

Trent Randolph ............ Public Information Officer
   B.S., University of North Alabama

Faculty

Joe Mark Alls ........................................... Biology
   M.A., University of North Alabama
   B.S., University of North Alabama

Alex Austin .......... Auto Mechanics
   A.A.T., Bessemer State

Ann Bales ................. Nursing
   M.S.N., University of Alabama in Huntsville
   B.S.N., University of North Alabama
   A.D.N., Northwest State Junior College

Joan Baltes .............. Economics
   B.S.B.A., Auburn University
   M.S., Troy State University
   Ph.D., Northcentral University

Callie Bankston ......... Cosmetology
   M.S., Alabama A & M University
   B.S., Athens State University
   A.S., Northwest-Shoals Community College

Debbie Benson .......... English, Developmental English
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   B.S., University of North Alabama

Eddie Bowen ............ Criminal Justice
   M.S., Jacksonville State University
   B.S., Jacksonville State University

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   B.S., University of North Alabama
   A.S., Northwest Alabama State Junior College

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   M.A., University of North Alabama
   B.A., University of North Alabama

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   B.S., Henderson State University

Randy Corsbie ......... Air Conditioning/Refrigeration
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   B.S., University of North Alabama

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   A.A.S., Northwest-Shoals Community College

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   B.S., David Lipscomb College

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   M.Ed., M.A., B.A., University of Montevallo
   A.S., Jefferson State Community College

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   M.S., University of Alabama
   B.S., Southern University
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B.S.N., University of North Alabama

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A.S., Northwest Alabama State Junior College

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B.A., University of Tennessee

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B.S., University of North Alabama

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M.A., Alabama A&M University
B.S., Auburn University
B.S., Harding University

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B.S.N., University of North Alabama

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B.S., Athens State College
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B.S.N., University of North Alabama
A.D.N. Northeast Mississippi Community College

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A.S., Northwest Alabama Junior College

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B.S.N., University of North Alabama

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M.S., Western Kentucky University
M.S., University of Alabama
B.S., University of Alabama

Matthew Johnson .............................................. Machine Tool
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B.S. Athens State University

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and Humanities/English
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B.A., University of North Alabama

Mark Lee .............................................. Physical Education
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B.S., University of North Alabama
B.S., Troy State University

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B.S., Athens State University
A.O.T., Northwest-Shoals Community College
Certificate, Northwest-Shoals Community College

Sarah Logan .............................................. Nursing
CRNP., University of Alabama, Huntsville
M.S.N., University of Alabama, Huntsville
B.S., University of Alabama, Huntsville
A.A.S., Northwest Alabama Junior College

Ginger Long ......................... Chairperson for Transitional Studies
M.A., University of North Alabama
B.S., University of North Alabama

Ann Lyndon ................ Director of Student Support Services/
Mathematics
M.A., University of North Alabama
B.S., Middle Tennessee State University

Tim Maupin ......................... Machine Tool/CNC
A.A.S., Shoals Community College

Melissa Mays ......................... Nursing
D.N.P., University of Alabama - Birmingham
M.S.N., University of South Alabama
B.S.N., Wilmington College
A.D.N., Walker College

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B.S., University of North Alabama

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B.S., University of North Alabama

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B.A., University of North Alabama
A.S., Northwest-Shoals Community College

Justin Morgan ......................... English
M.A., University of North Alabama
B.S., University of North Alabama

Jennifer Morris ......................... English
Ph.D., Middle Tennessee State University
M.A., University of Kansas
B.A., Judson College

Ray Morris ......................... Electrical Technology
IBEW Apprenticeship School

Michael Murphy ................ Chemistry and Physical Science
Ph.D., Ohio State University
M.A., University of South Dakota
B.S., University of Wisconsin

Todd Oyen ......................... EMS
M.A.Ed, University of Alabama-Birmingham
B.S., University of North Alabama
Diploma, Gwinnett Technical Institute
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<tr>
<th>Name</th>
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<td>Rachel Hogan Trapp</td>
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<td>Kim Tucker</td>
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<td>Sharon Berrian Watson</td>
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<td>Lauren Wright</td>
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**Program Directors**

Kathy Benson .......... Director of Educational Talent Search
                       Phil Campbell Project

Edwin Carter ....... Director of College and Career Readiness/ Instructional Services Specialist

April Cookson .......... Director of Distance Education/ Web Page Designer/Instructor

William Garner .......... Director of Training for Existing Business and Industry

Judy Hamby .......... Director/Counselor- Tennessee Valley Project (TS)

Doug Hargett .......... Director of Safety and Security
Shauna James........... Director of Student Financial Assistance
Ann Lyndon ................... Director of Student Support Services/Mathematics
Alan Mitchell ............... Director of Management Information Systems/Technical Services
Meredith Sides............... Transitional Studies Director
Mark A. Simpson ............ Director of EMS Program
Shelia Smith .................. Director of Nursing Education
Donald Sweeney ............. Director of Adult Education

**Professional and Support Personnel**

Sherry Akers...............Human Resources Generalist I
Joan Amishead...............Instructor Assistant
Marnie Austin...........Counselor, Educational Talent Search, Phil Campbell Project
Tara Branscome ..... Coordinator of Ready-To-Work Program
Ingeborg Bristow..........Financial Aid Specialist
Deborah Brownell ..........Upward Bound Academic Advisor Phil Campbell Campus
Sonya Burkhart............Preschool Teacher
Melissa Burleson ..........Custodial/Groundskeeper
Sara Cagle..................Upward Bound/Testing Center Phil Campbell
Monica Cochran ............ Competency Testing Lab Aide
Terry Cochran............... Maintenance Carpenter
Teresa Colvin...............Assistant Librarian
Kimberly Dean .............Promotional Services Assistant
Kenneth Denson............Video Production Technician
Lavon Duboise...............Secretary V-Vice President’s Office
Casey Eggleston ............Counselor/Coordinator, Upward Bound Program Shoals Campus
Sharon Farned...............Maintenance Employee I
Amber Fenn...............Counselor, Educational Talent Search Tusculbia Project
Terron Fields ...............Graphics/Video Specialist II
Carolyn Fincher ..........Competency Testing Laboratory Manager II
Mary Jane Finley ...........Counselor, Educational Talent Search Phil Campbell Project
Jonathan Foster ..........Campus Security Officer (Non-Certified)
Robert Freeman ..........Computer Technician I
Terrance Freeman ..........Campus Police Officer I
Brian Fuller ..............Maintenance Employee I
Steve Gasque .............Programmer - Applications Developer
Debbie Glasgow ............Secretary V-Associate Dean/VP of Student Development Services/Recruitment

Adam Goodman ............Student Success Coach
Donna Green ..............Secretary to the President/Public Relations Assistant/Student Activities Coordinator
Vickie Green ..............Lead Preschool Teacher
Tammy Gresham ..........Secretary V-Fiscal Affairs
Jo Guzman .................Teacher/CHD Practicum Supervisor
Melvin Hairrell ............Maintenance Technician I
Lisa Hall ..................Secretary I, Student Financial Services
Joyce Hamilton ..............Custodial Employee
Rosell Hamilton ..........Secretary I, Adult Education
Darlene Hamm ..............Registrar
George Handley ............Maintenance Technician IV
Elizabeth Harris ..........Upward Bound Counselor/Coordinator Phil Campbell
Teresa Harrison ..........Administrative Assistant II President’s Office
Denise Hester ..............Secretary I - Financial Aid
Bridget Holt ..............Custodial Employee II
Tim Inman .................Maintenance Supervisor III
Stephanie Irons ..........Clerk II-Maintenance
Mary Jackle ...............Fitness Center Employee II
Sandra Jackson ..........Accounting Clerk II
Jo James .................Assistant to Occupation Division and Medical Assisting Division
Jacqueline Jefferys .......Child Development Coordinator
Maxine Johnson .....Receptionist for the Social Science and Fine Arts and Humanities Division
Ryn Johnson ...............Custodial Employee
Brittany Jones .............Student Success Coach
Sheron Kemp ..............Accountant I
Carol Kerr .................Distance Education Specialist II
Megan Landrum ..........Biology Laboratory Coordinator
Wesley Lawrimore ..........Custodial Employee
Elaine Malone ..........Preschool Teacher
Chris Martin .............Math Success Center Coordinator
Sharon Jo McBride .......Secretary V-Student Development Services/Youth Success
Janice McCalpin ....Retention Specialist/Database Coordinator
Martha McMillan ..........Computer Technician II
Chenee McRae...........Retention Specialist (P.C.)
Kim Miller ...............Fitness Center/Wellness Program Manager III
Malea Mistead ..........Coordinator of Advising Center
Melissa Mitchell ..........Upward Bound Office Clerk Shoals Campus
Janine Moore .............Media Assistant
Darlene Moyer ............Custodial Employee
Michelle Napier .................................. Manager I - Admissions
Tammy Nichols ........ Office Clerk, Educational Talent Search
Phil Campbell Project
Becki Nobles ......................... Maintenance Employee I
Marchia Oates ........... Coordinator of Student Success Center
Lindsey Oliver ............... Coordinator of Student Development/Recruitment Manager
Lindsey Peck ............... Financial Aid Assistant
Ruth Ann Underwood
Sharon Josey
Melanie Swinne
William Michelle
Michelle Stoner
Brantley Price
Lindsey Beck
Ashleigh Raney
Trent Randolph .............. Public Information Officer
Pam Raper ....................... Payroll Manager
Susie Rickard............... Secretary to Public Relations and Recruitment Office
Reyna Rivera........ Office Specialist, Vice President's Office
Brian Roberts .................... Maintenance Employee II
Dana Robertson ............. Assistant Accountant I
Scott Ruffrage ............ Maintenance Employee II
Shelly Sharp ............... Information Technology Technician II/Secretary
Talia Speck ............... Office Clerk, Tennessee Valley Educational Talent Search/Tusculumba Talent Search
Cindy Stewart .......... Coordinator, Educational Talent Search Tusculumba Project
Angela Stone ................ Administrative Systems Analyst/Programmer
Tia Stone ................. Human Resources Coordinator
Michelle Swinney .......... Accountant I
Kem Terry .................. Testing/Advising Specialist II
William Thomason ........ Campus Police Officer I
Jeff Thompson .............. Campus Police Officer II
Melanie Thompson .......... Advisor/Testing Assistant
Michael Thompson .......... Maintenance Employee II
Rita Thorne .......... Competency Testing Laboratory Manager II
Leslie Tomlinson ............ Transfer Advisor
Josey Trawick ............ Computer Technician I
Sharon Tucker .............. Secretary II-Financial Aid
Ann Underwood .......... Secretary II-EMS/Grant Development
Ruth Vallejo .............. Assistant Maintenance Supervisor I
Dudley Vandiver .......... Machine Shop Trainer
Tommy Varnell .............. Maintenance Employee I
Linda Vickery .......... Secretary II-Learning Resources Division
Tammy Wadkins ............ Custodial Employee
Tracy Waldrop .............. Secretary II-Records
Janie Wallace ............ Upward Bound Academic Advisor
Shoals Campus
Jennifer Weaver .......... Assistant Preschool Teacher
Pam Welborn ............ Secretary, Monitor for Federal Programs
Dennis Wells .............. Welding Specialist
Jesse White .......... Carpenter/Cabinetmaking Assistant
Meredith Wiley .......... Financial Aid Assistant
Phil Campbell Campus
Rebecca Wilson .......... Coordinator of Admissions and Financial Aid
Phil Campbell Campus
Mandy Winstead ........ Assistant to Nursing Department
Adriana Wuotto ........ Secretary IV - Vice President's Office
Melissa York-Keeton .......... Secretary II-Admissions and Records

Skills Training - Adult Education
Donald Sweeney ............ Director
Kem Grissom ............ Testing/Advising Specialist I
Gloria Butts ............ Teacher
Barbara Dunlap .......... Teacher
Benetia Groce .......... Teacher
Dana Mays .......... Teacher
Betty Stone .......... Teacher
Lisa Terry .......... Teacher
Wanda Vandiver .......... Teacher
Liz Wilcoxson .......... Teacher

Alabama Technology Network
Muscle Shoals Center
Mitch Hamm ............ Director
Brent Bendall .......... Industrial Hygienist
Pam Elrod .......... Business Manager
Joey Massey .......... Technical Specialist
Larry McCoy .......... President Emeritus
Robert Tomlinson .......... Technology Manager
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